

San Antonio Texas

Part I

What principles are the professionals learning to make streets more pedestrian & bicycle-friendly?

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Oregon DOT B/P Program Manager



A good street accommodates many uses



How efficient are mono-modal streets?









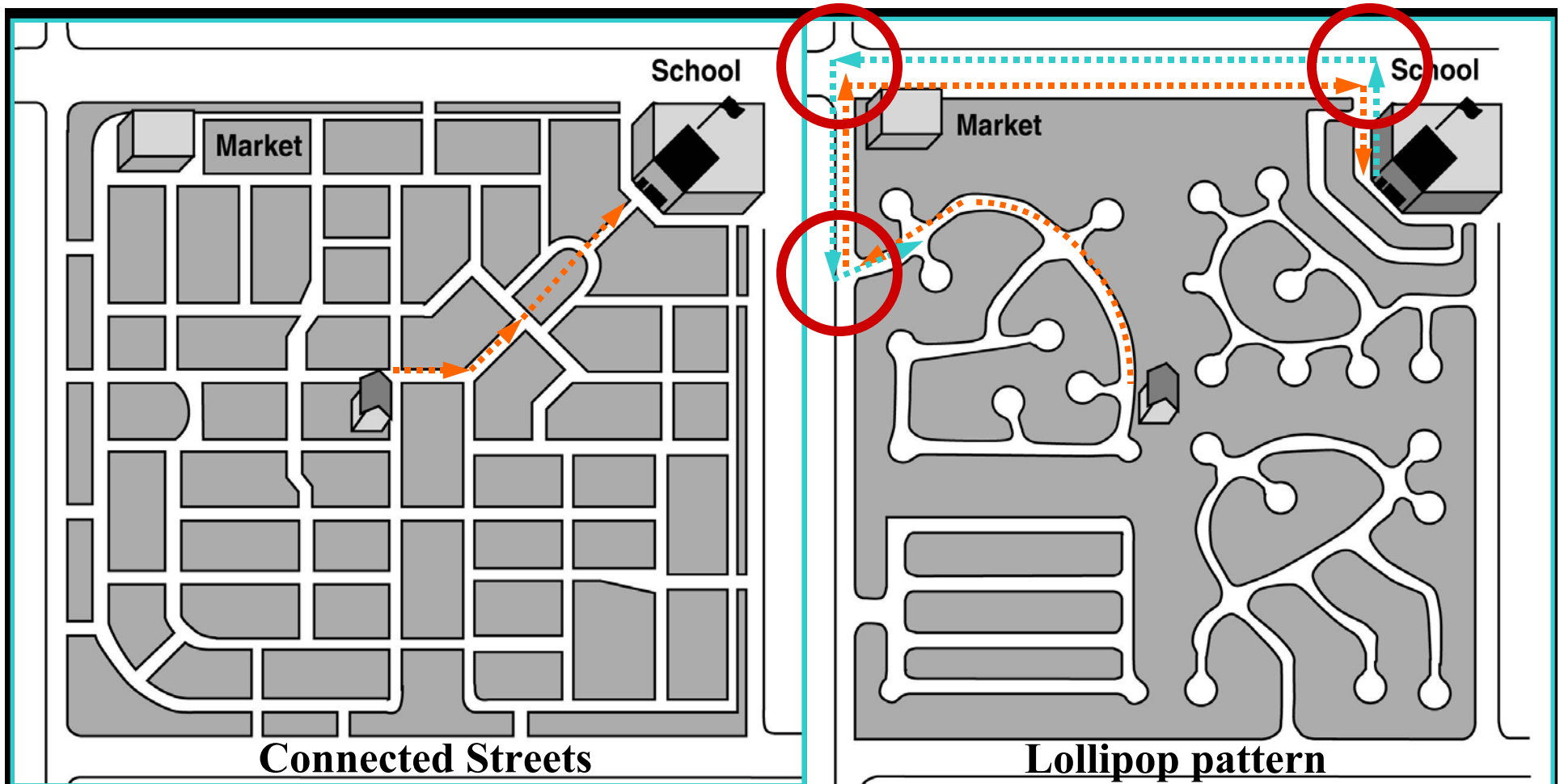








**Our task is to create communities...
... not just move people and goods**



Connectivity creates a pedestrian-friendly street system by:

- **Reducing walking distances;**
- **Offering more route choices, more quiet local streets;**
- **Dispersing traffic**







Which brings us straight to land use...

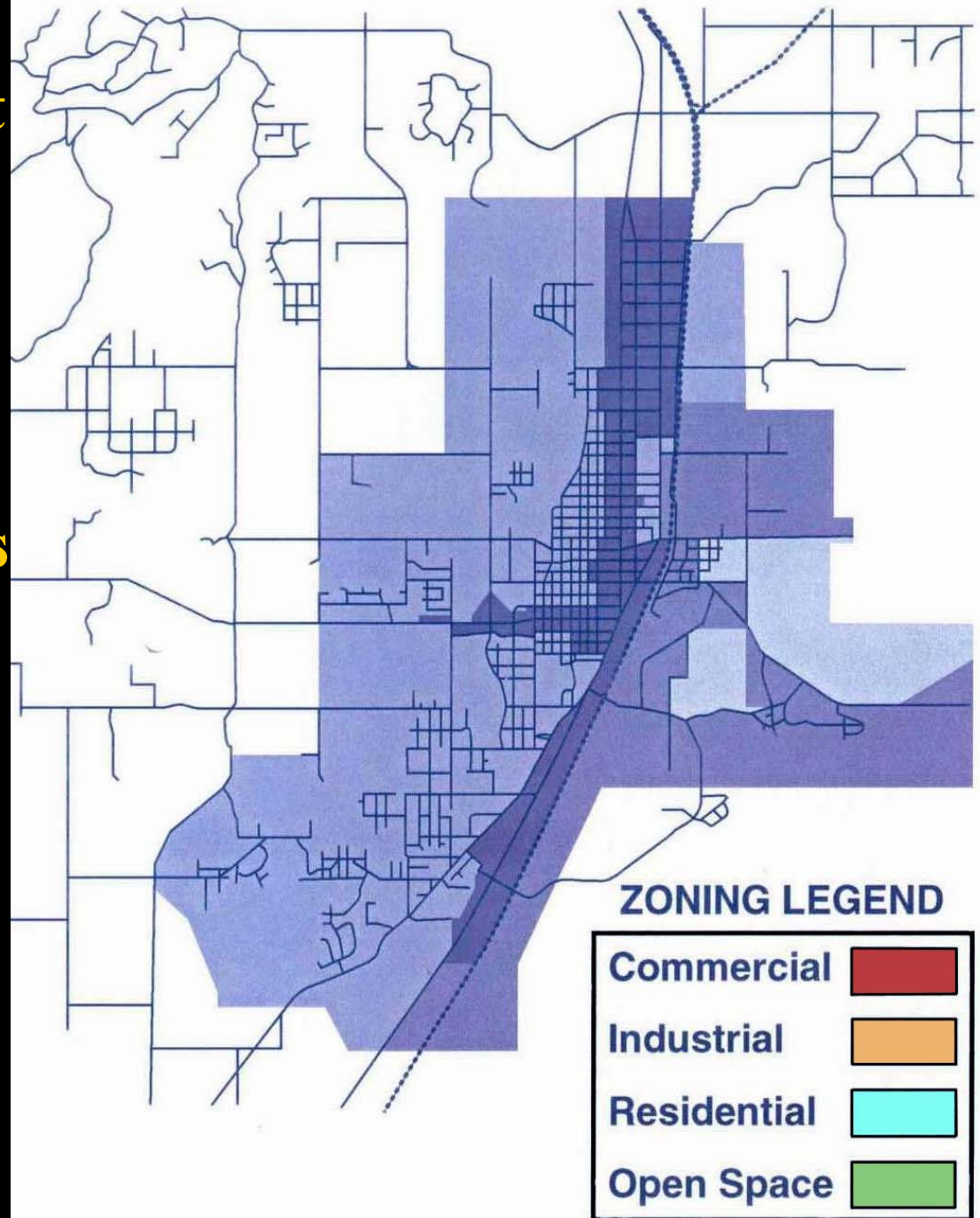


How do you get there from here?

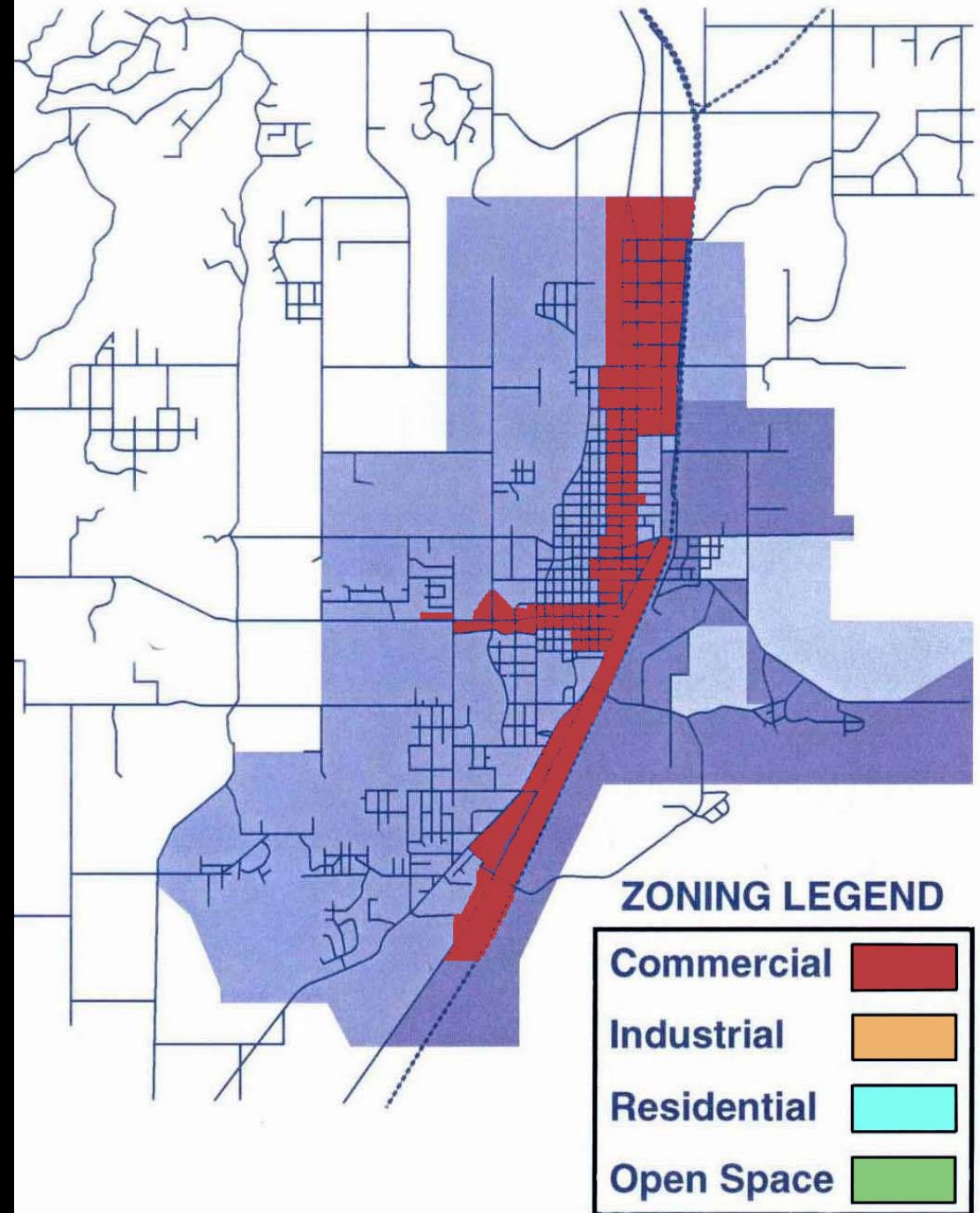
Post WW2 development patterns favor:

- Segregation
- Long travel distances
- Commercial activities concentrated in auto-dominated corridors.

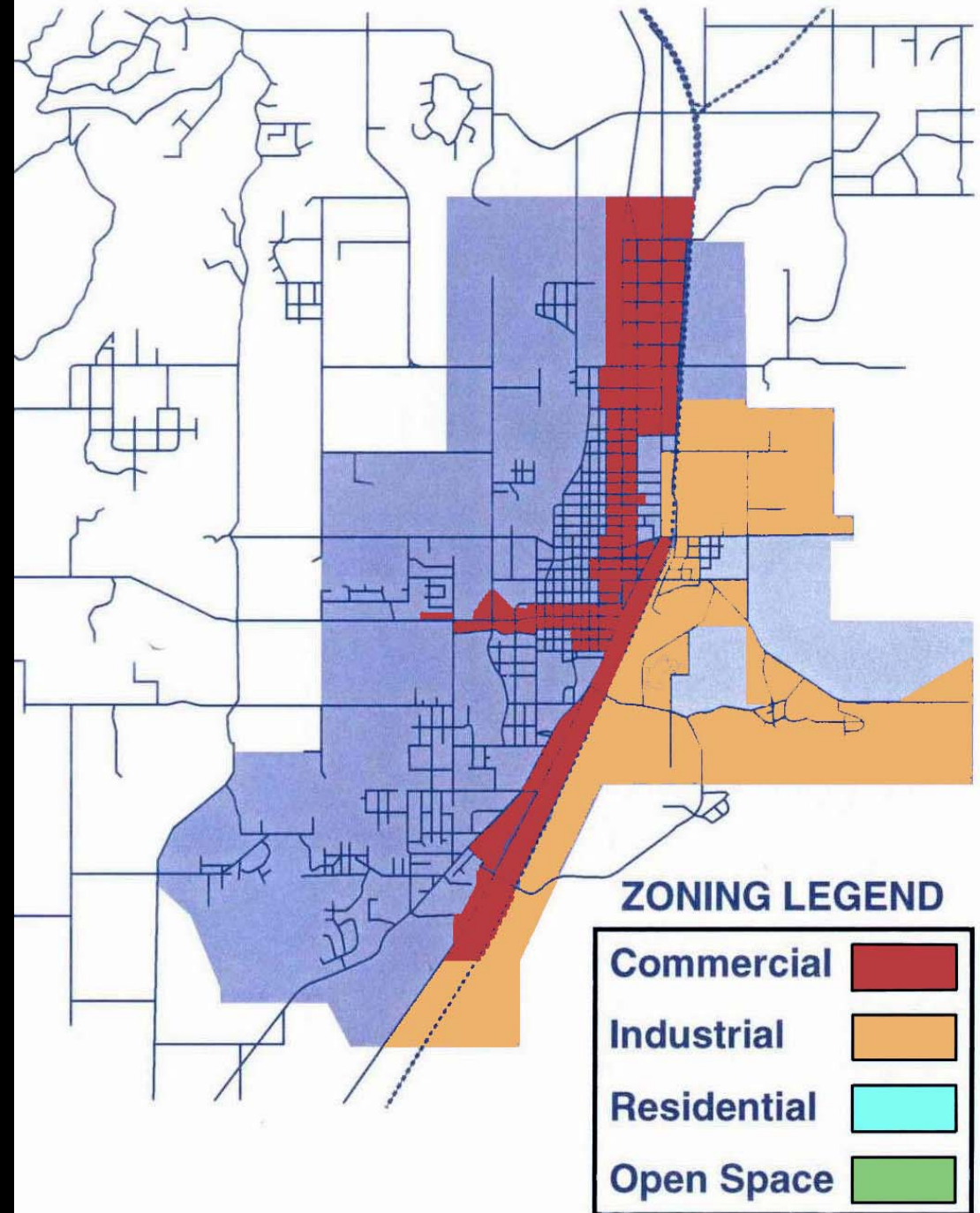
⇒ Not very nice for walking or biking!



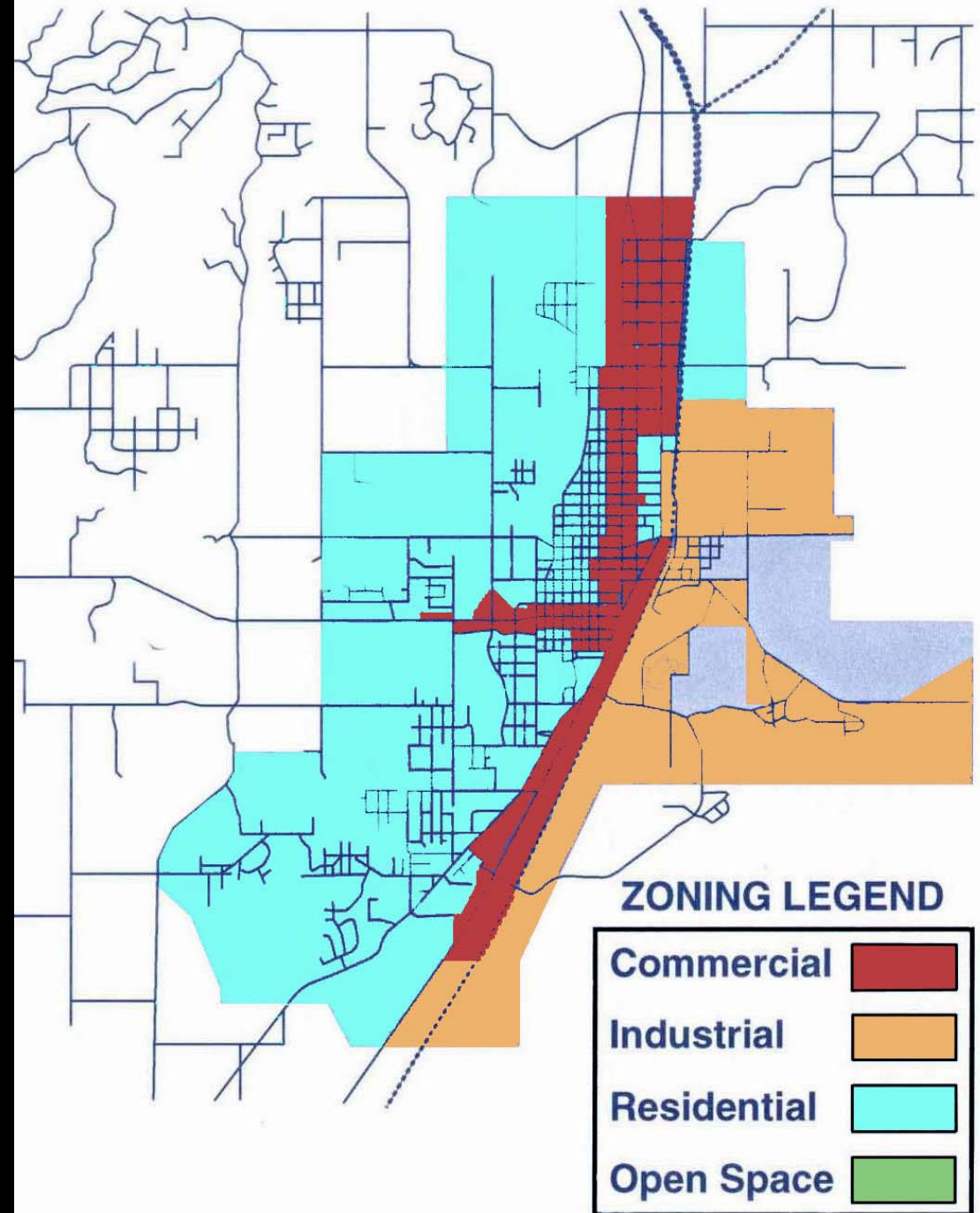
1. Concentrate all commercial activities in auto-dominated corridors.



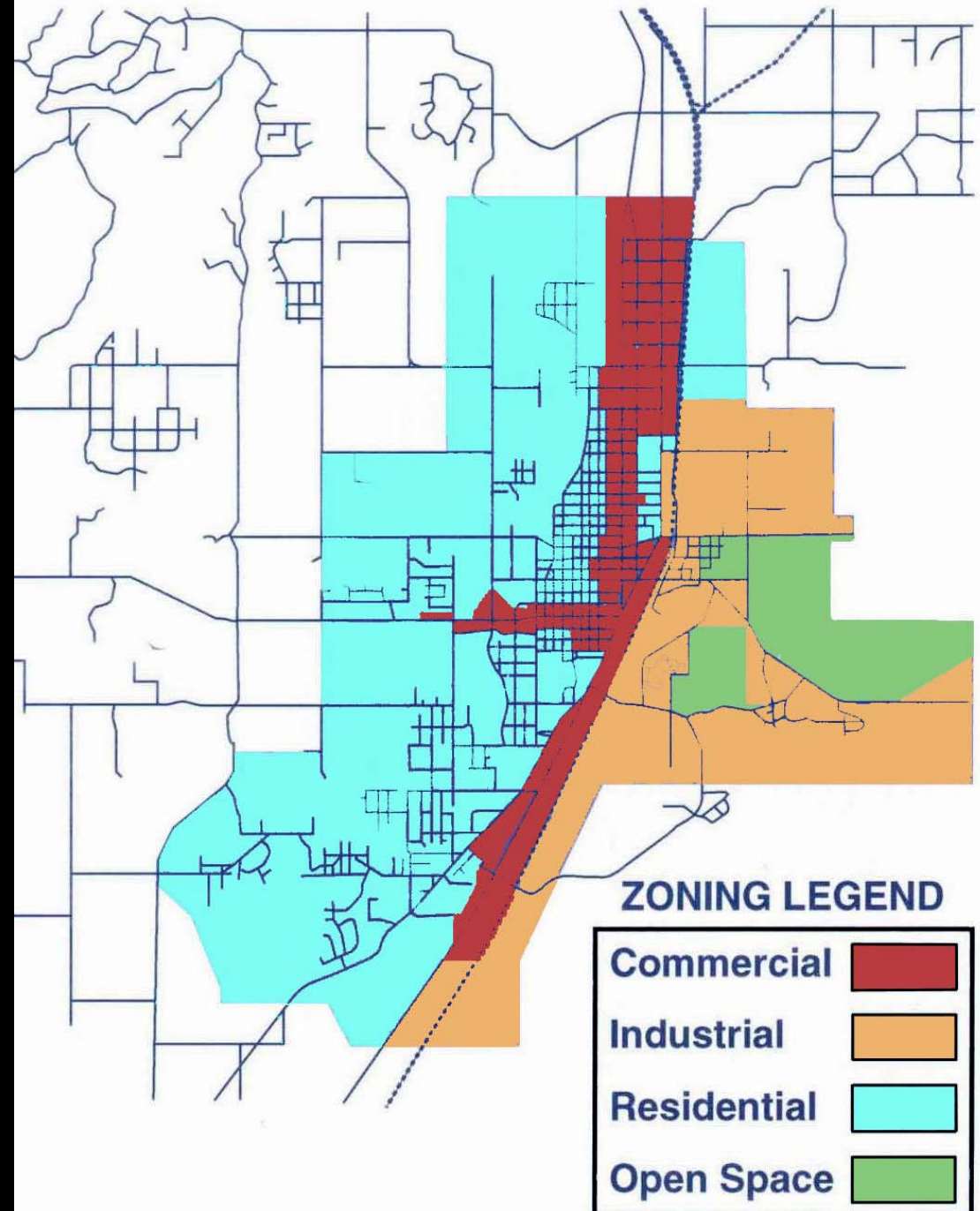
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- 2. Segregate land uses**



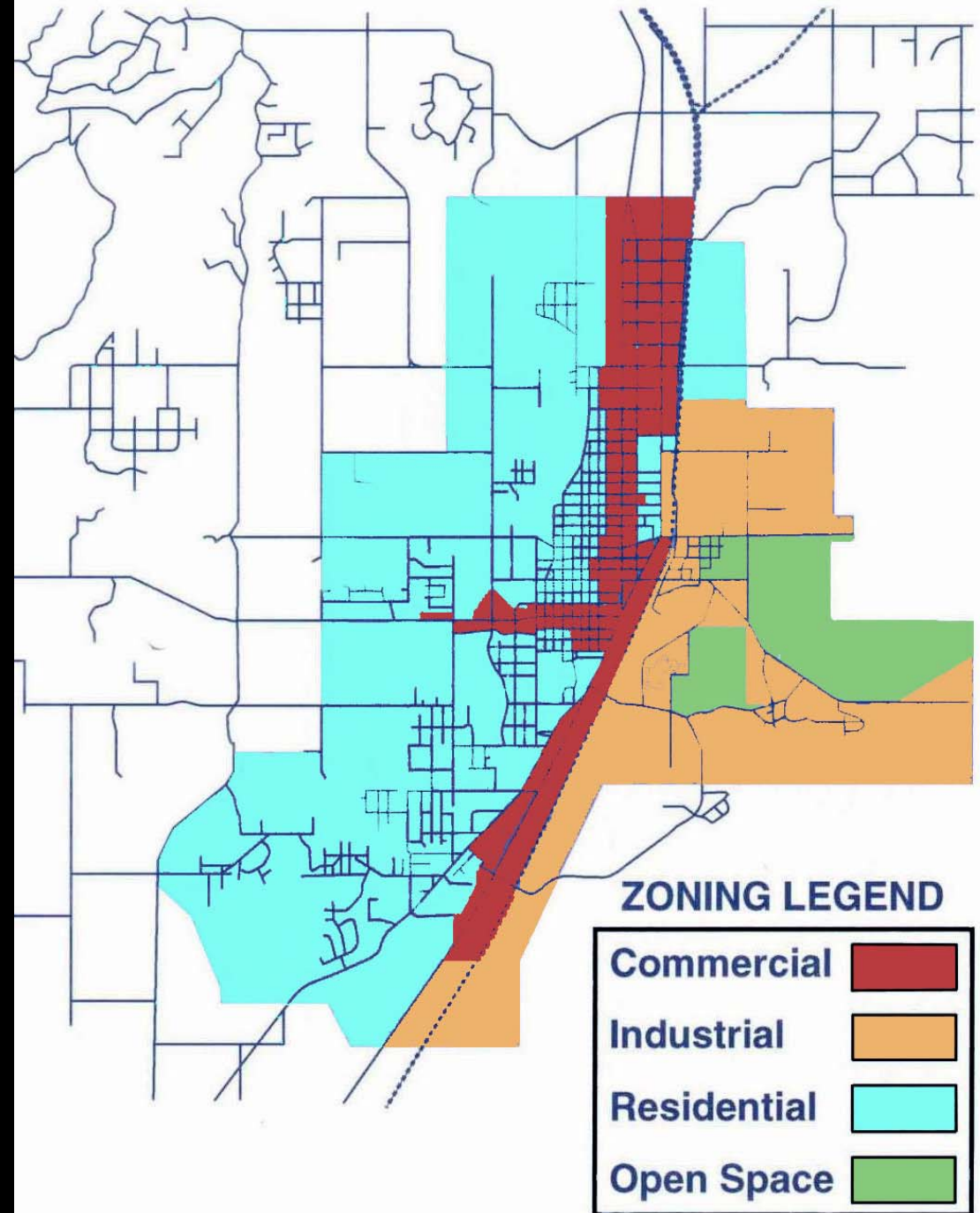
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- 3. Result: long travel distances, not conducive to walking & bicycling**

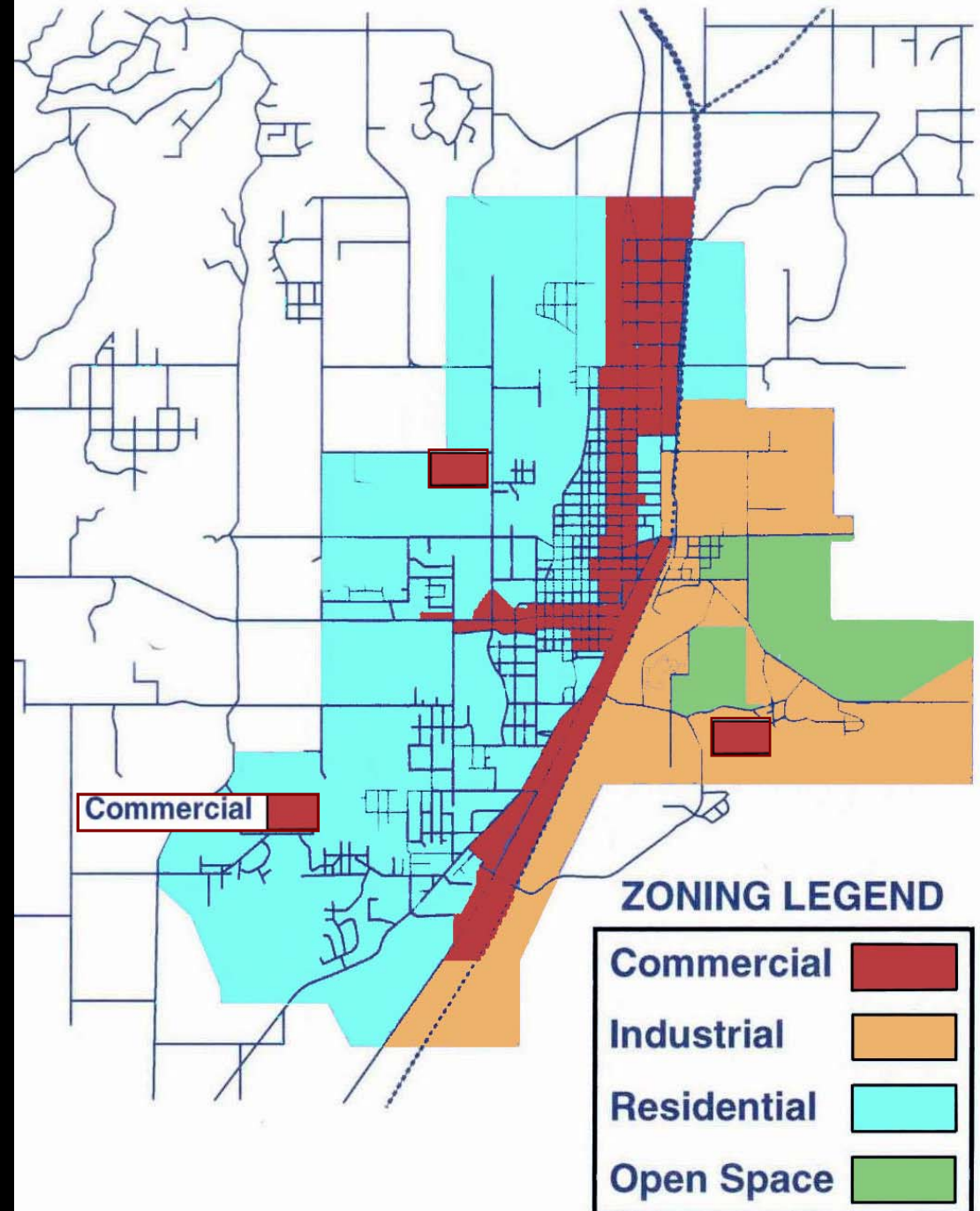


1. Concentrate all commercial activities in auto-dominated corridors.

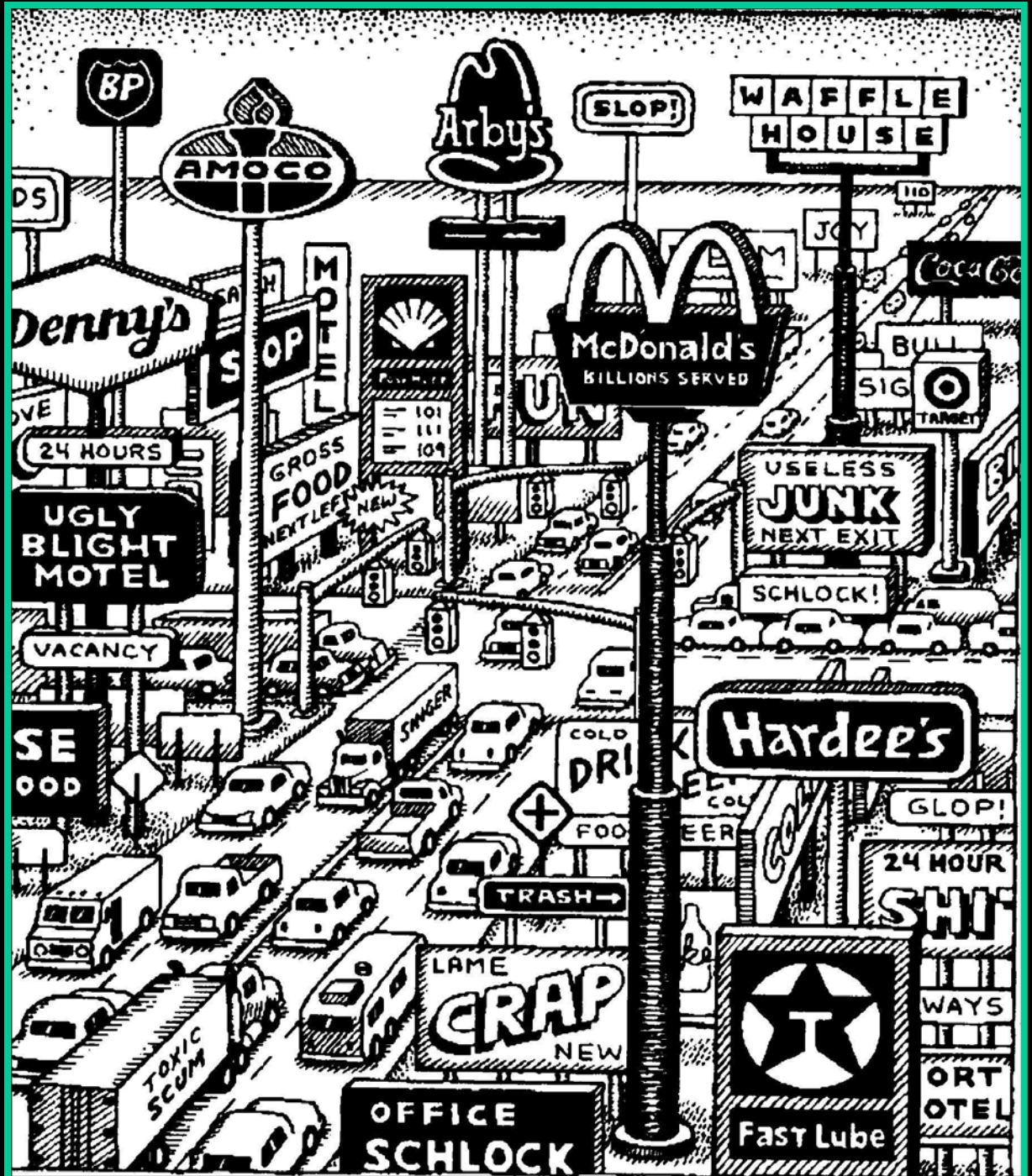
2. Segregate land uses

3. Result: long travel distances, not conducive to walking & bicycling

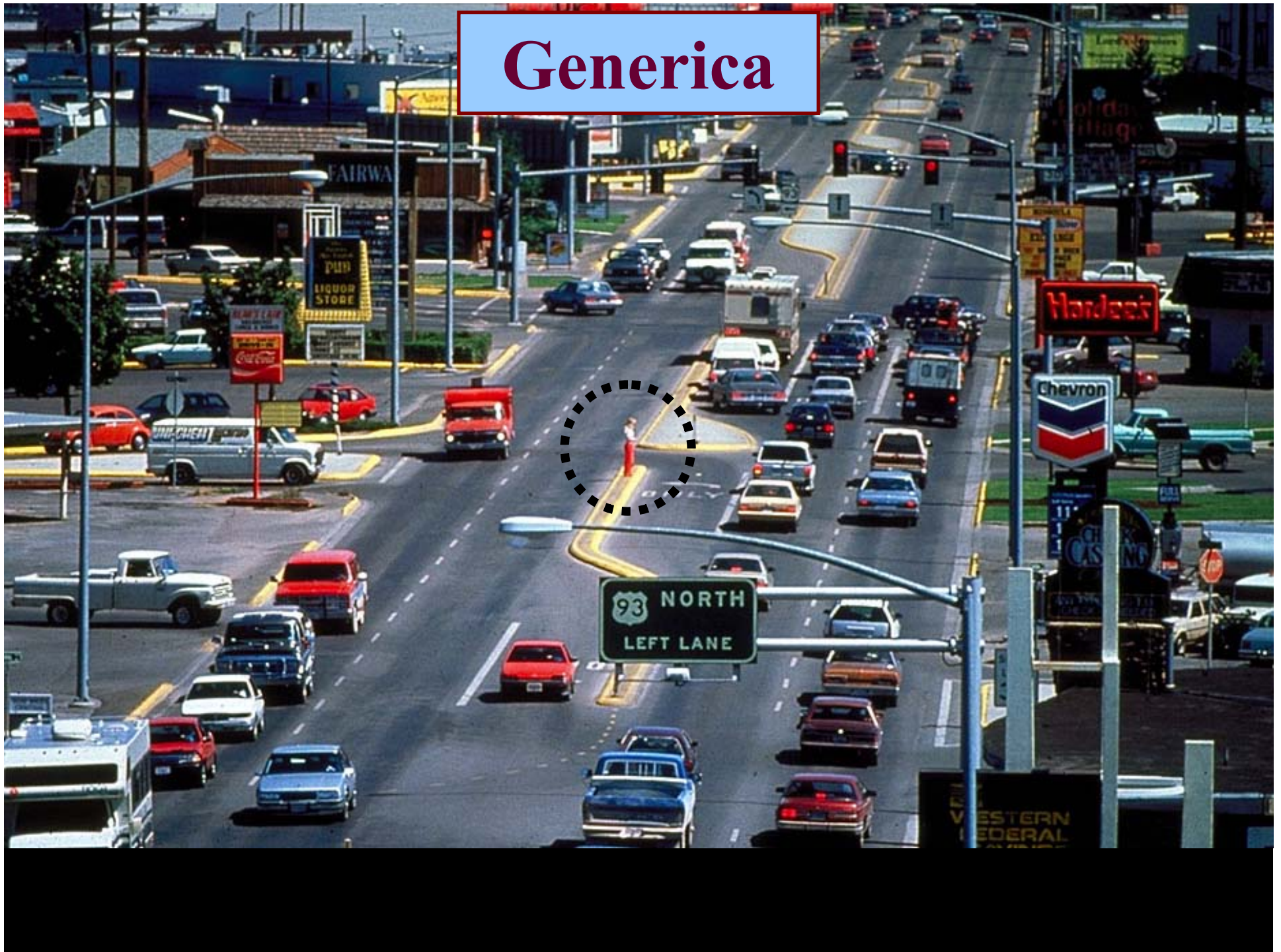
Potential solution?
Start by allowing small-scale retail in neighborhoods



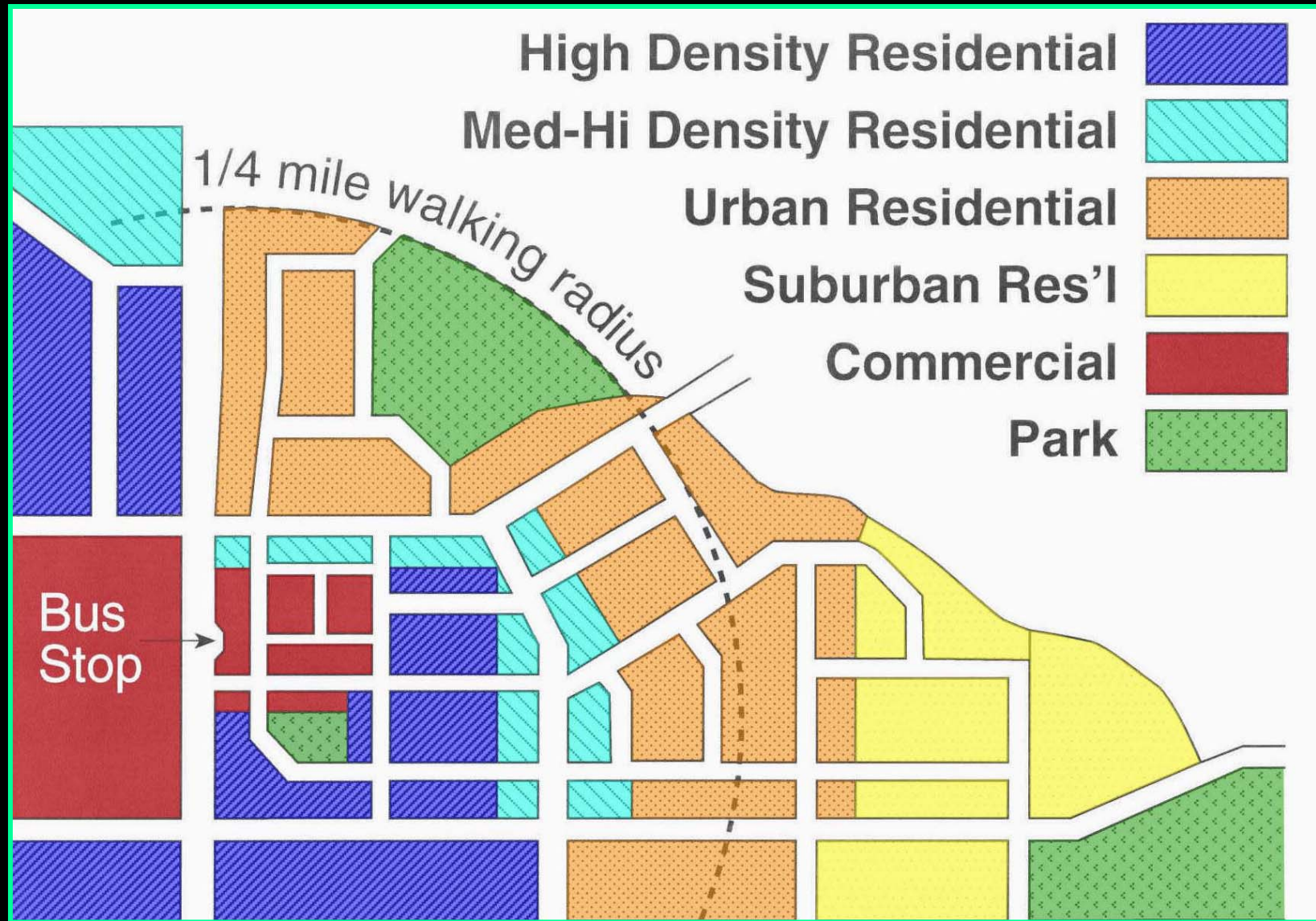
Is this
really the
American
Dream?



Generica



Neo-traditional development...



...creates walkability by bringing destinations closer together

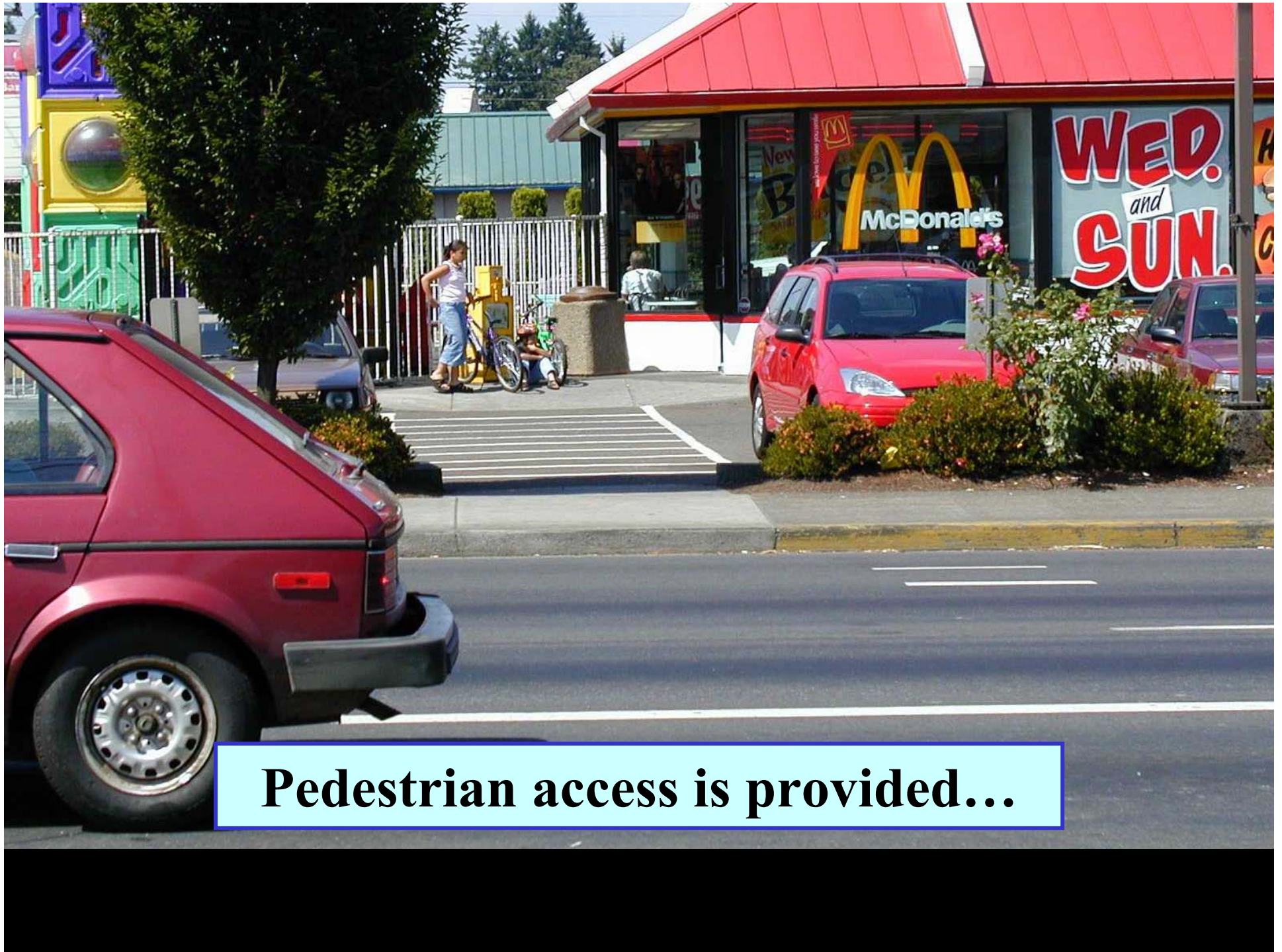








Fast food favors drive through over walk-ins...
It doesn't have to be this way!



Pedestrian access is provided...

A photograph of a concrete sidewalk running alongside a road and a grassy area with a brick border. The sidewalk is made of large, light-colored concrete slabs separated by expansion joints. To the left of the sidewalk is a dark-colored pickup truck parked on the street. To the right is a green lawn bordered by a low brick wall. In the background, there are trees and a house.

**What do we do to make
streets work for pedestrians?**

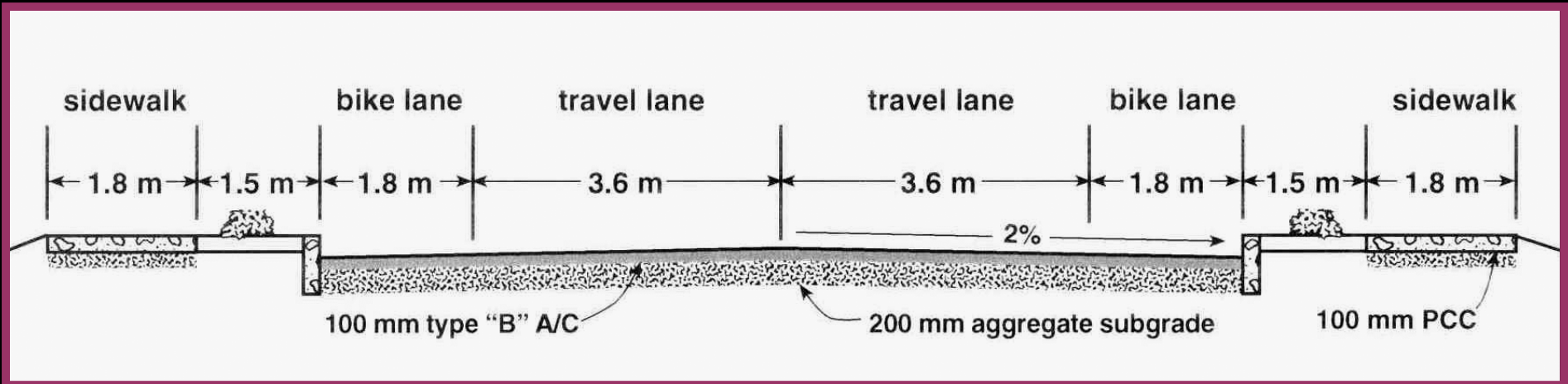
Add sidewalks!

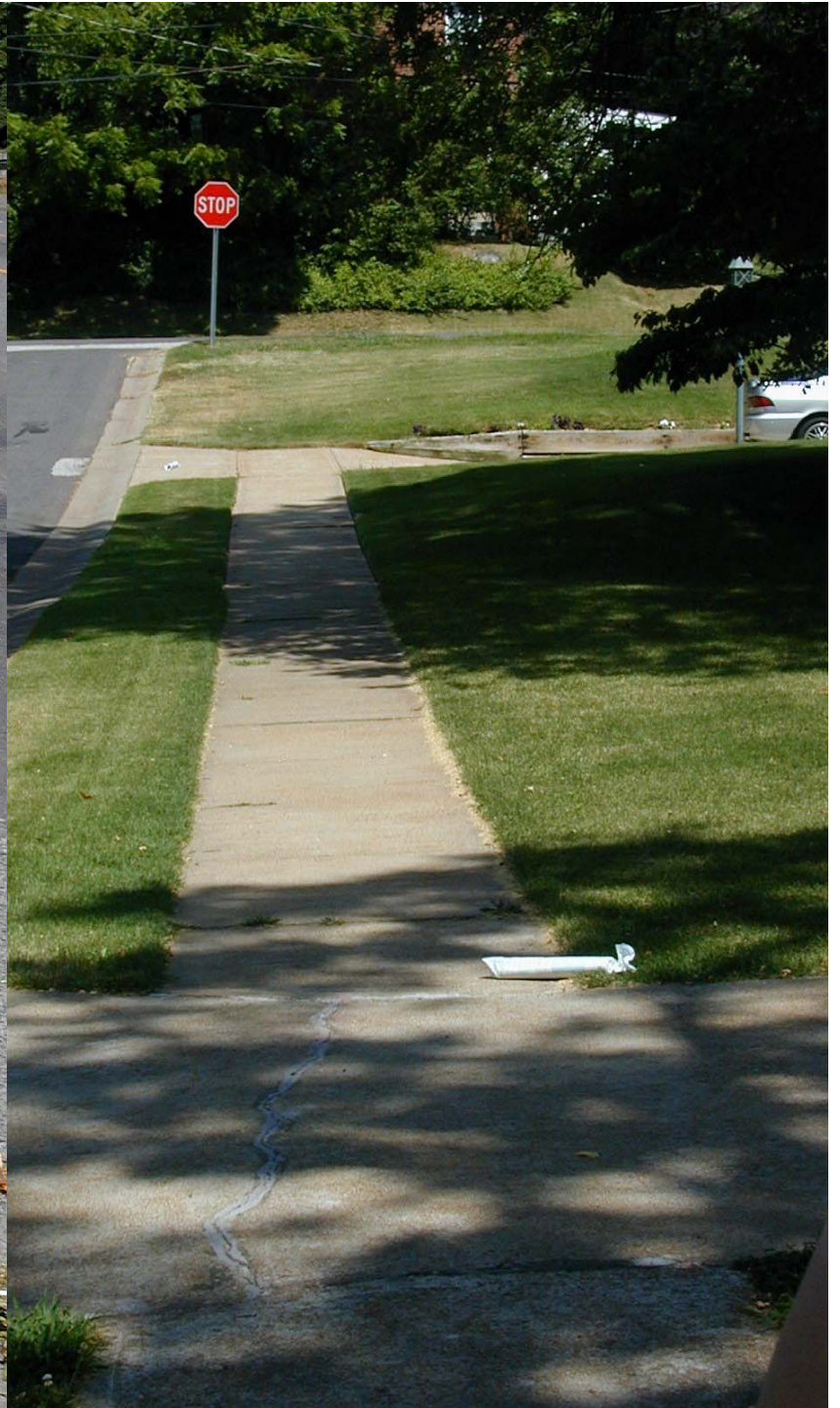
WHO SAYS SIDEWALKS ARE NECESSARY?

Answer:

- The AASHTO “Green Book”

Sidewalks are integral parts of city streets”



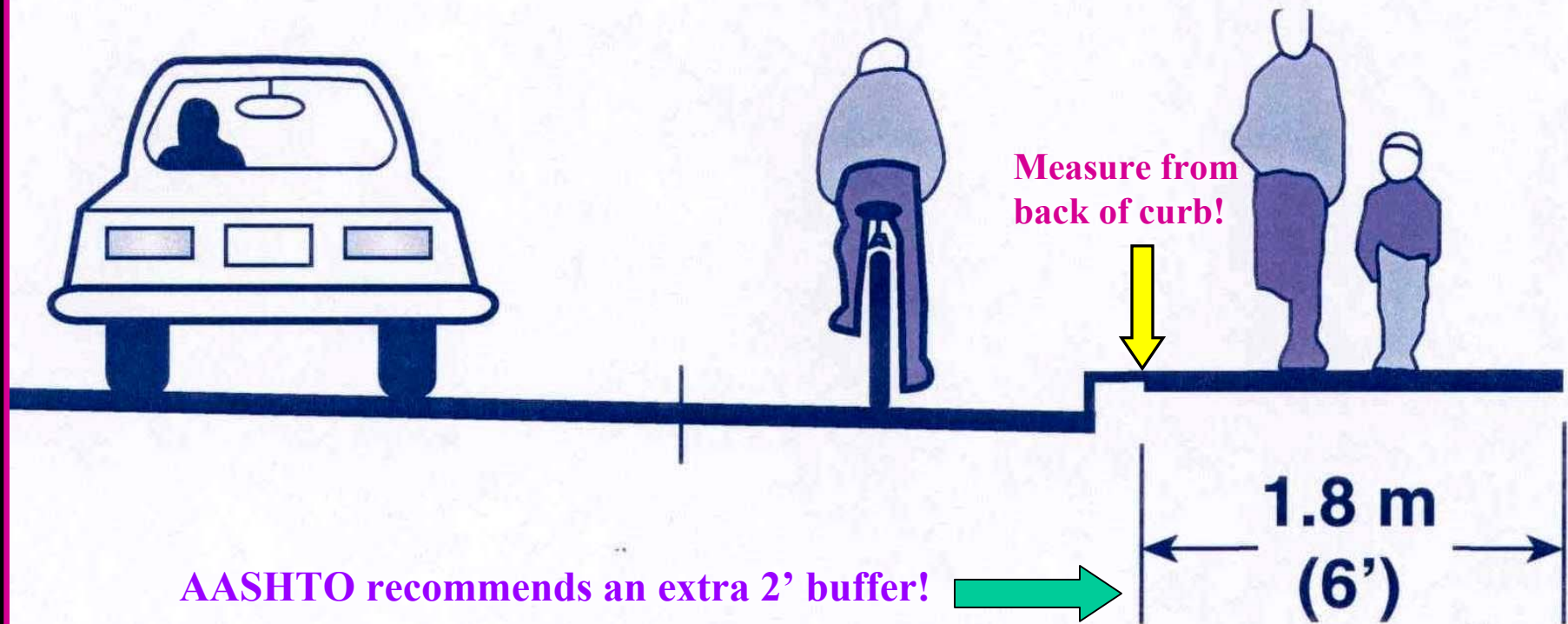




Why do sidewalks end?



“Problem i.d.” is quite simple



**Proper width for curbside sidewalk
(least desirable)**



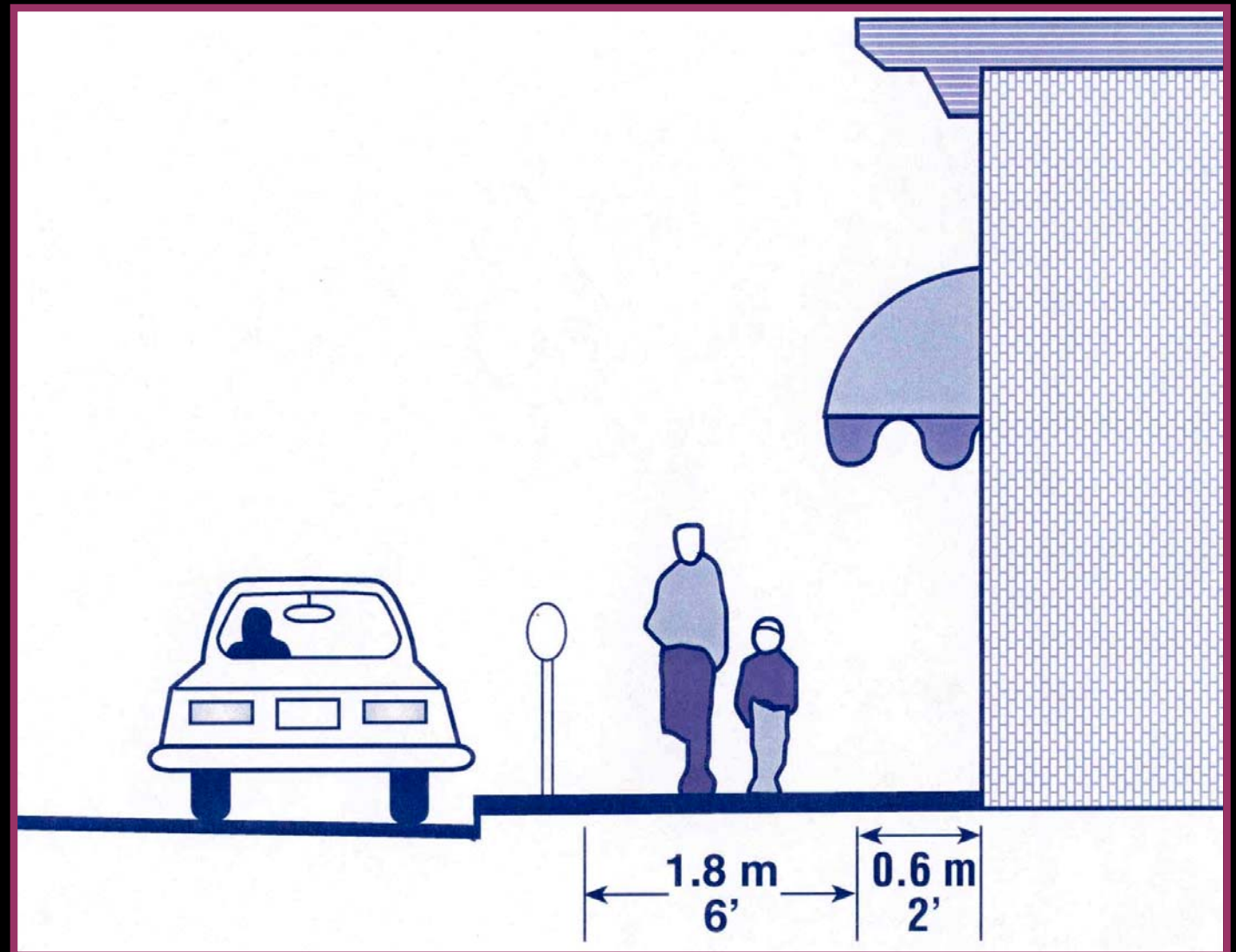
Measure from here



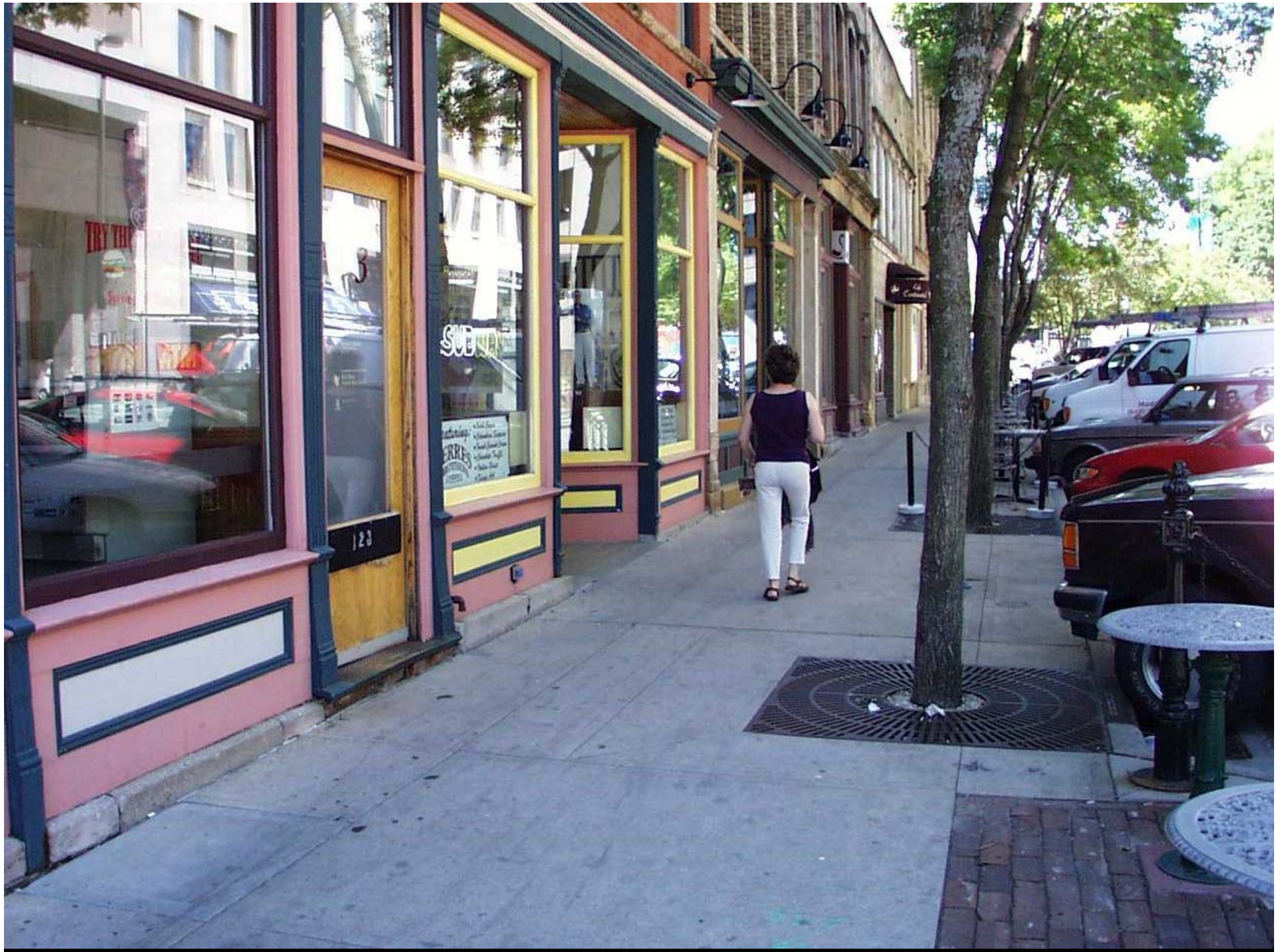
Sidewalk dimensions for CBDs

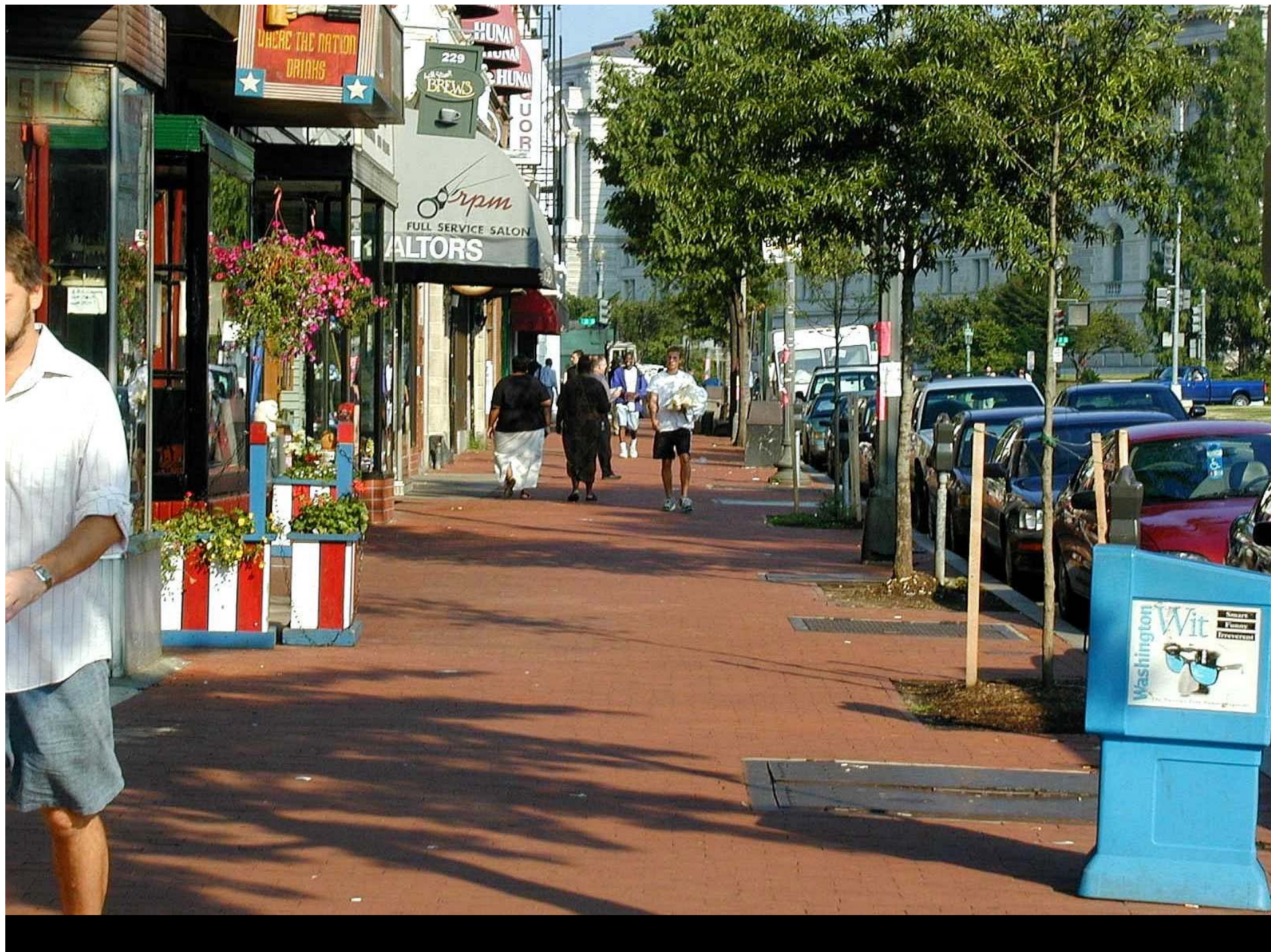
Consider 10' a minimum for business districts

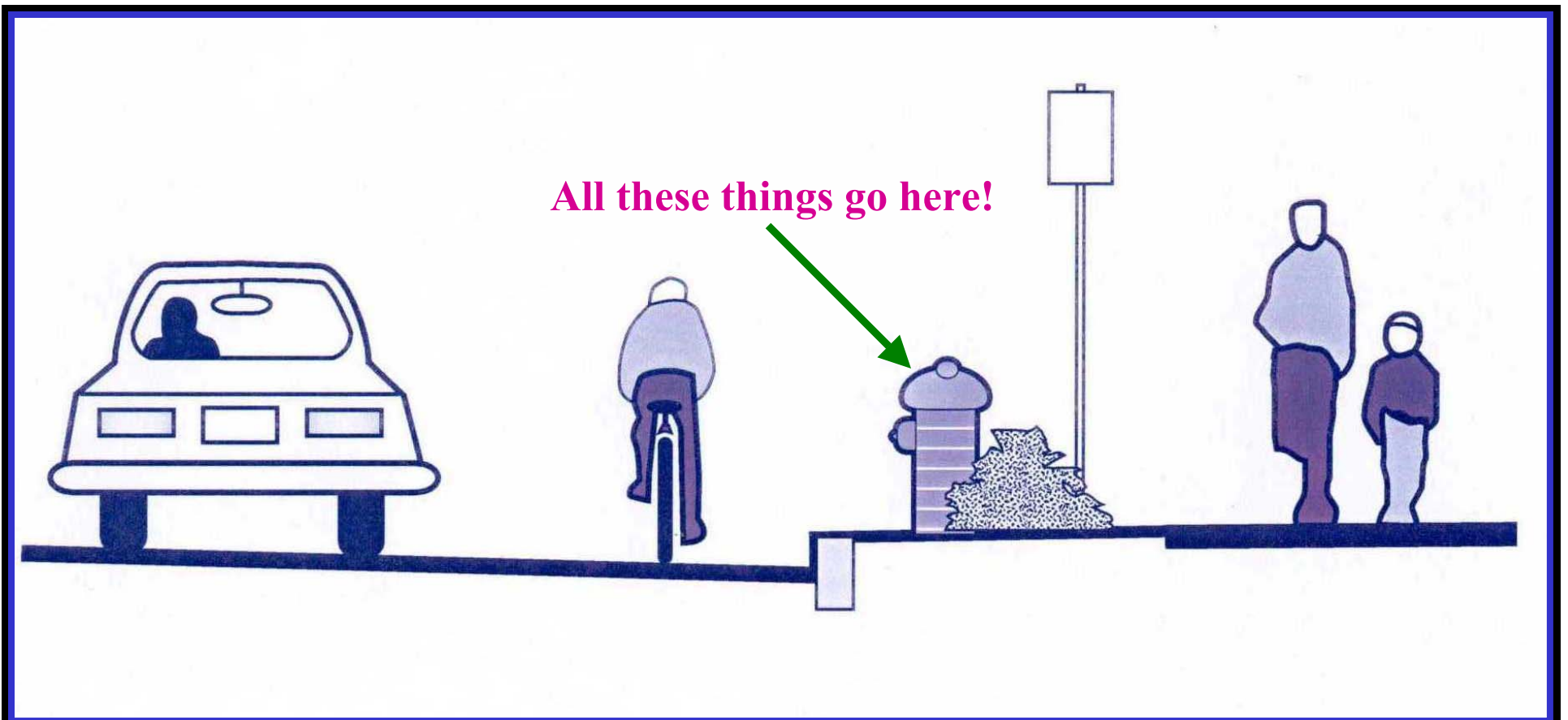
Set new buildings back 2' from lot line



Need extra width for shy distance, clear zone



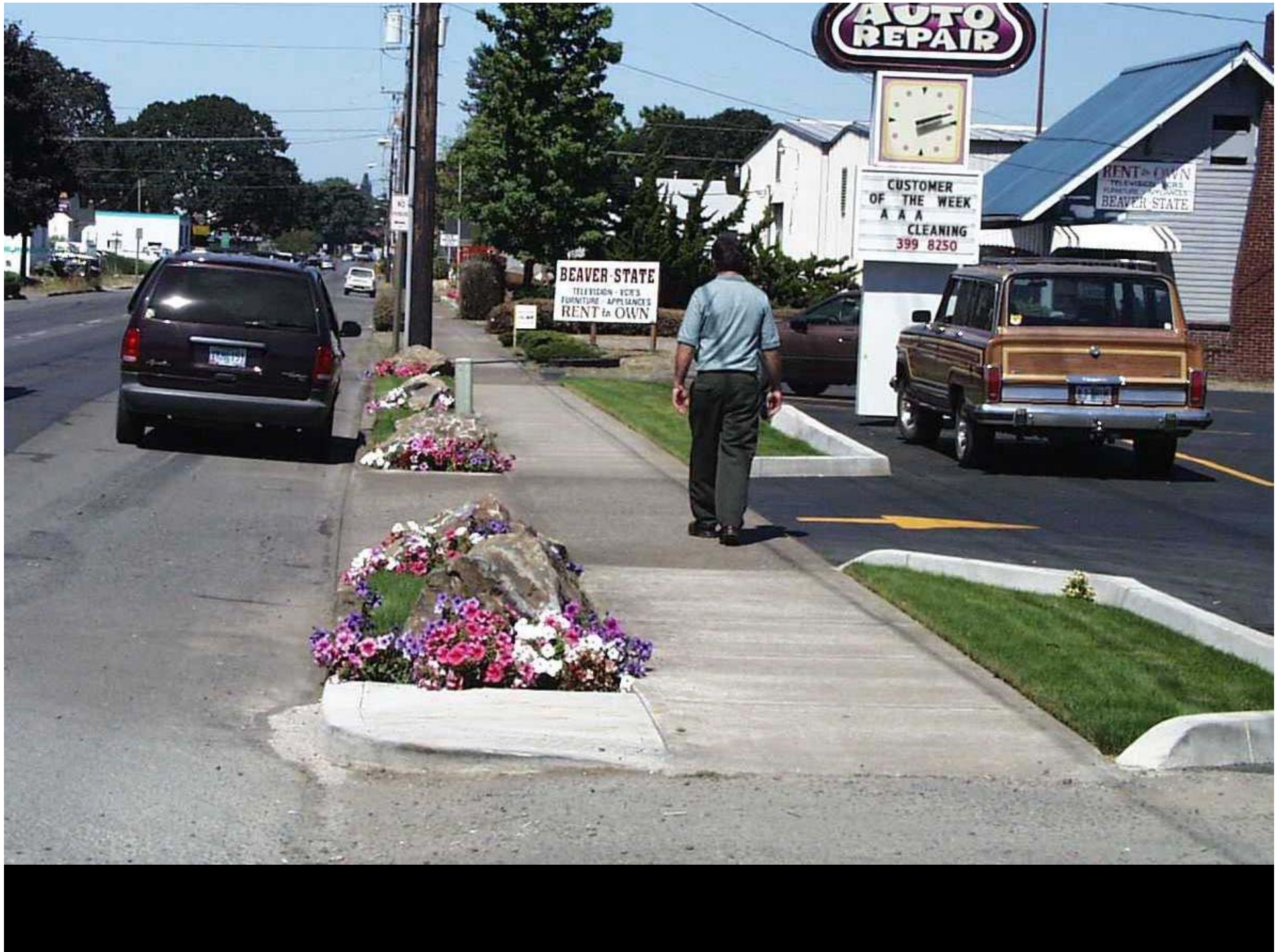




**Best solution: separate sidewalk with
planter strip (buffer, parkway...)**







Surfacing – nothing beats concrete





JUNE 19, 1903

1903

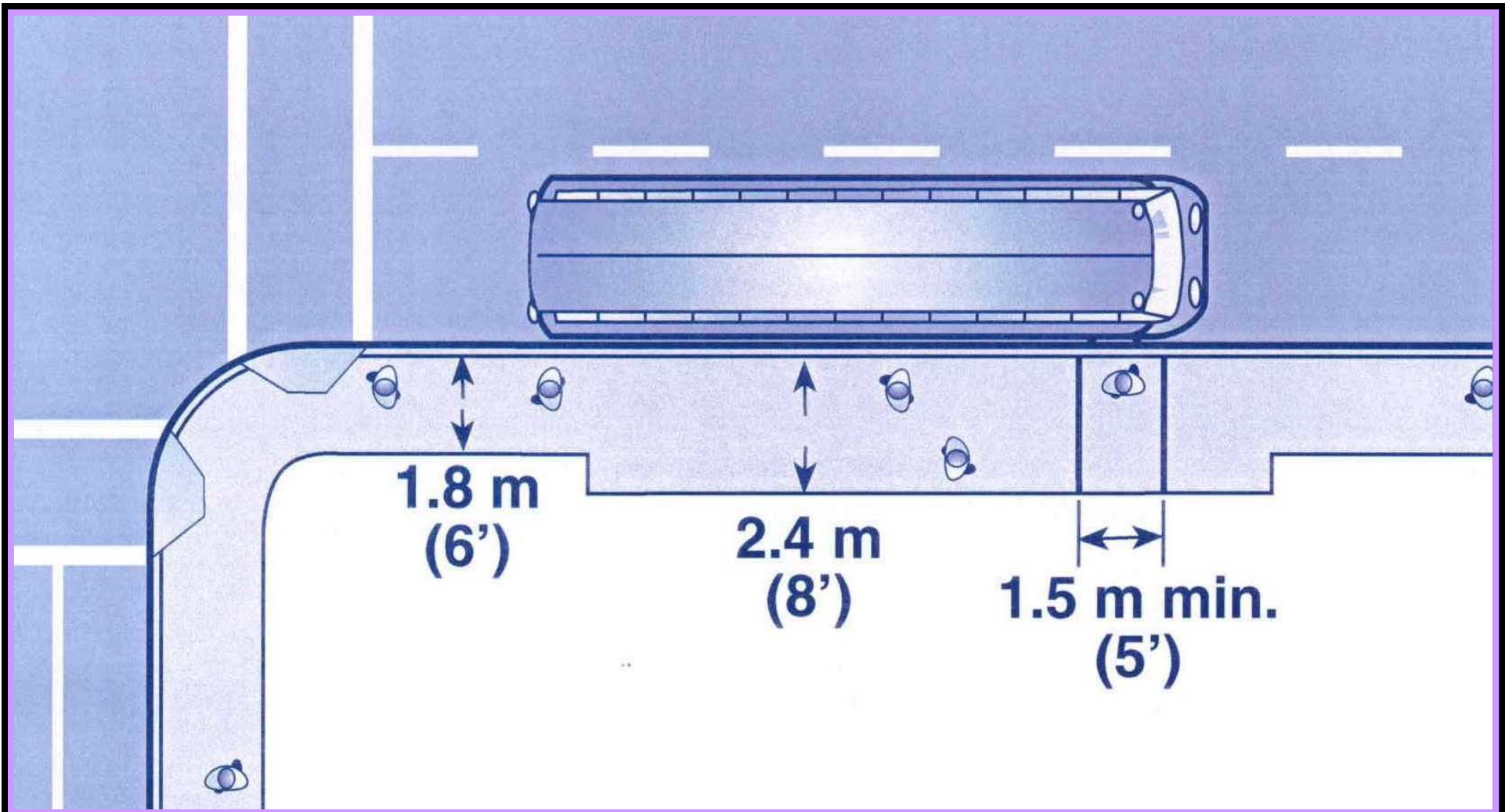
AMERICAN S.D.W. CO





Typical unmaintained brick sidewalks





Provide space for waiting, boarding & passing

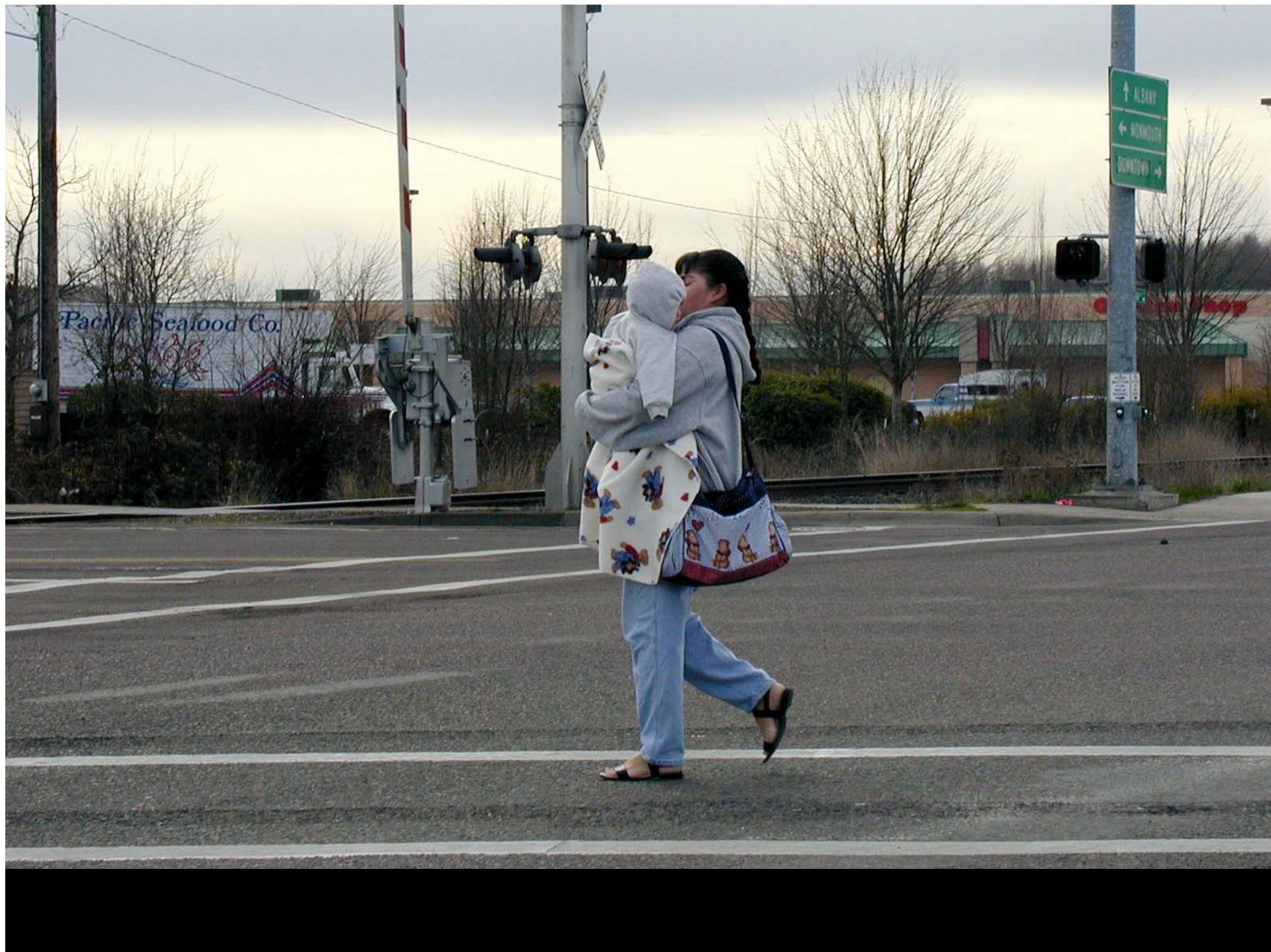




Crossing the street – nothing to it, right?



Just run like heck...





Ideally, we'd always cross at locations with positive control



But the reality is quite different



These middle-aged people are not criminals...
They're simply trying to deal with a situation

Basic crossing techniques

- Islands, medians, refuges
- Curb extensions
- Crosswalks
- Signals
- Over/Under crossings

[illegible]

❖ Break up into two easier crossings of one-way streets...











Intersections



Two bodies can't occupy the same space at the same time, right?



Bigger isn't always better...







What about roundabouts?

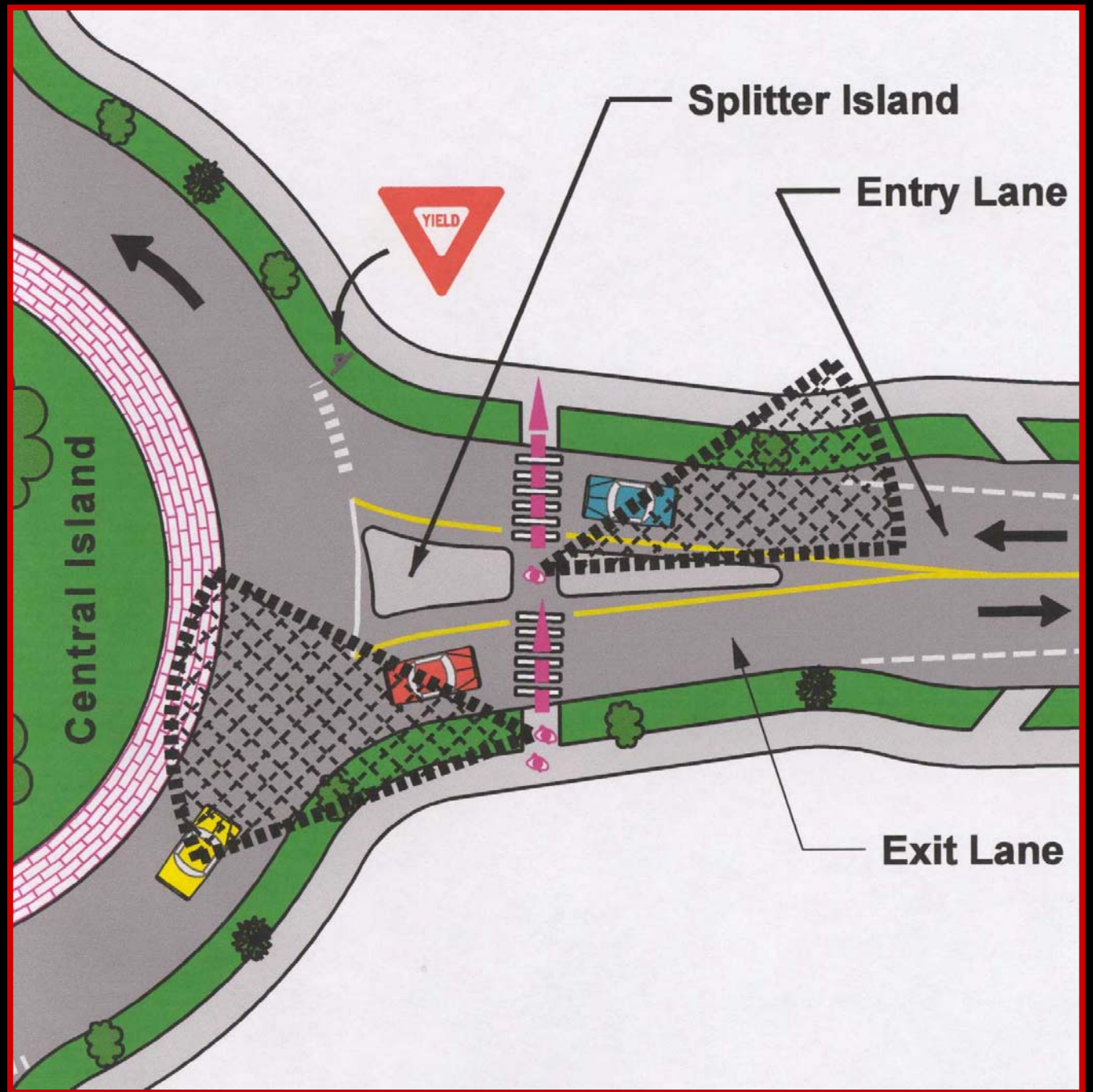
- **They are the best thing to come to this country since the Beatles!**
- **They are the worst thing to come to this country since designer coffees!**



What does it take to make roundabouts work for pedestrians?

- **Slow speeds – lots of deflection**
- **Simple, single lane, throughout**
- **Well-defined crossings**
- **Splitter islands**

Roundabout: Pedestrian usage



Key elements for pedestrians



Constrained entry to slow drivers

Key elements for pedestrians



Well defined crossings & splitter islands

Key elements for pedestrians



Well defined crossings & splitter islands

Bicyclists come in shapes & sizes





BASIC BICYCLING PRINCIPLE
Cyclists are vehicle operators



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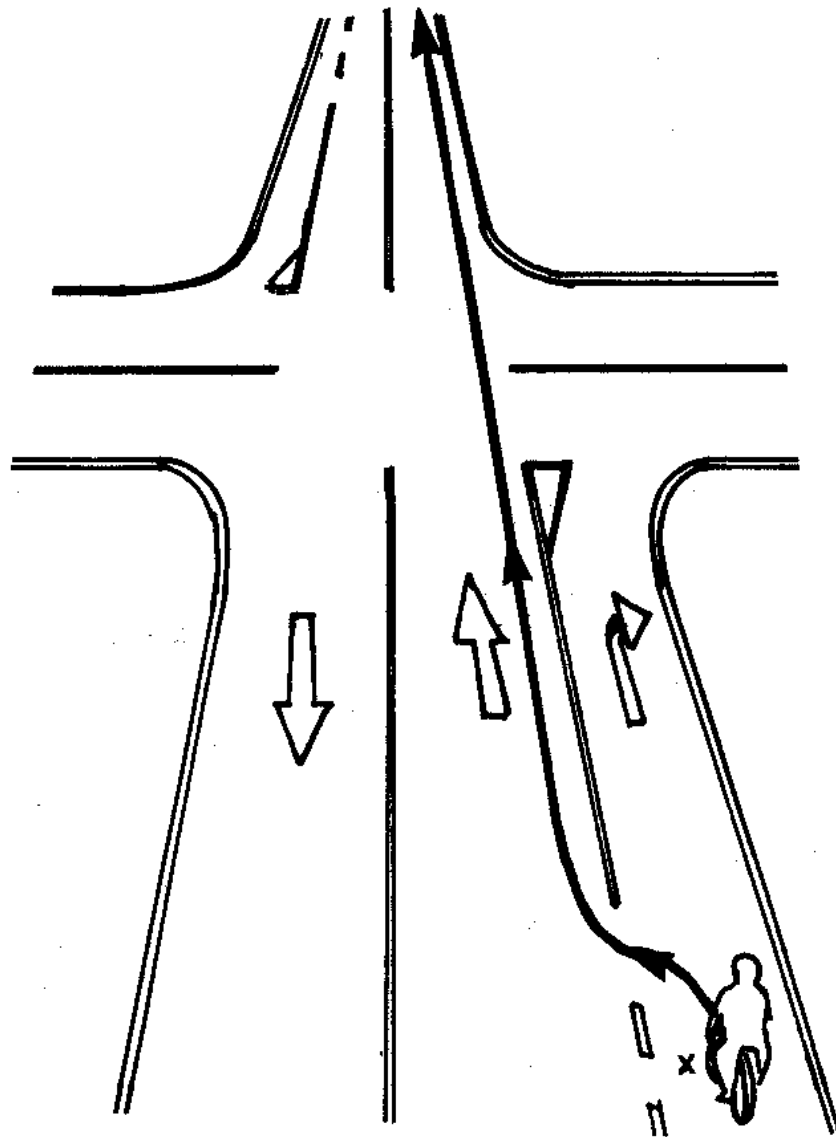
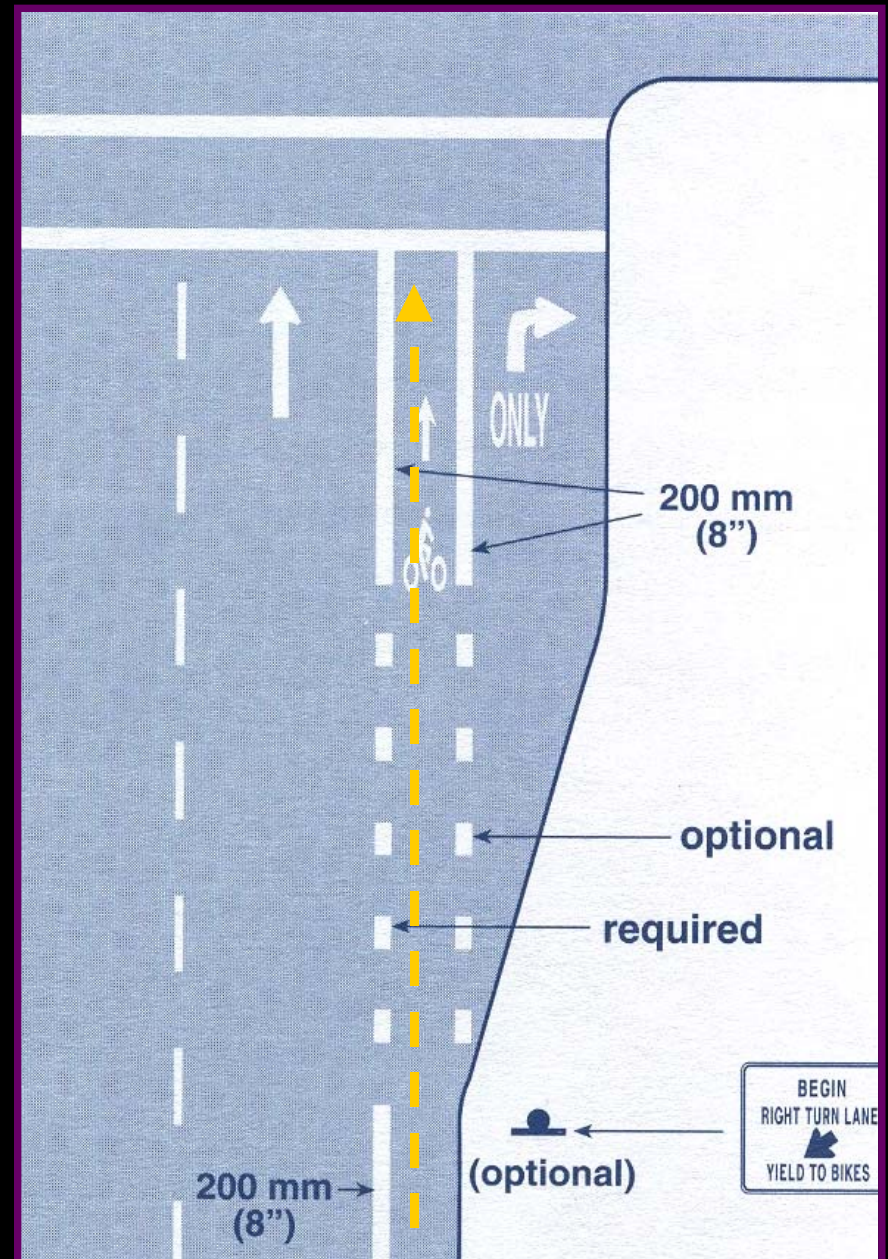


Fig. 13.6 Straight at right turning lane

“Expert” recommendation



Standard design



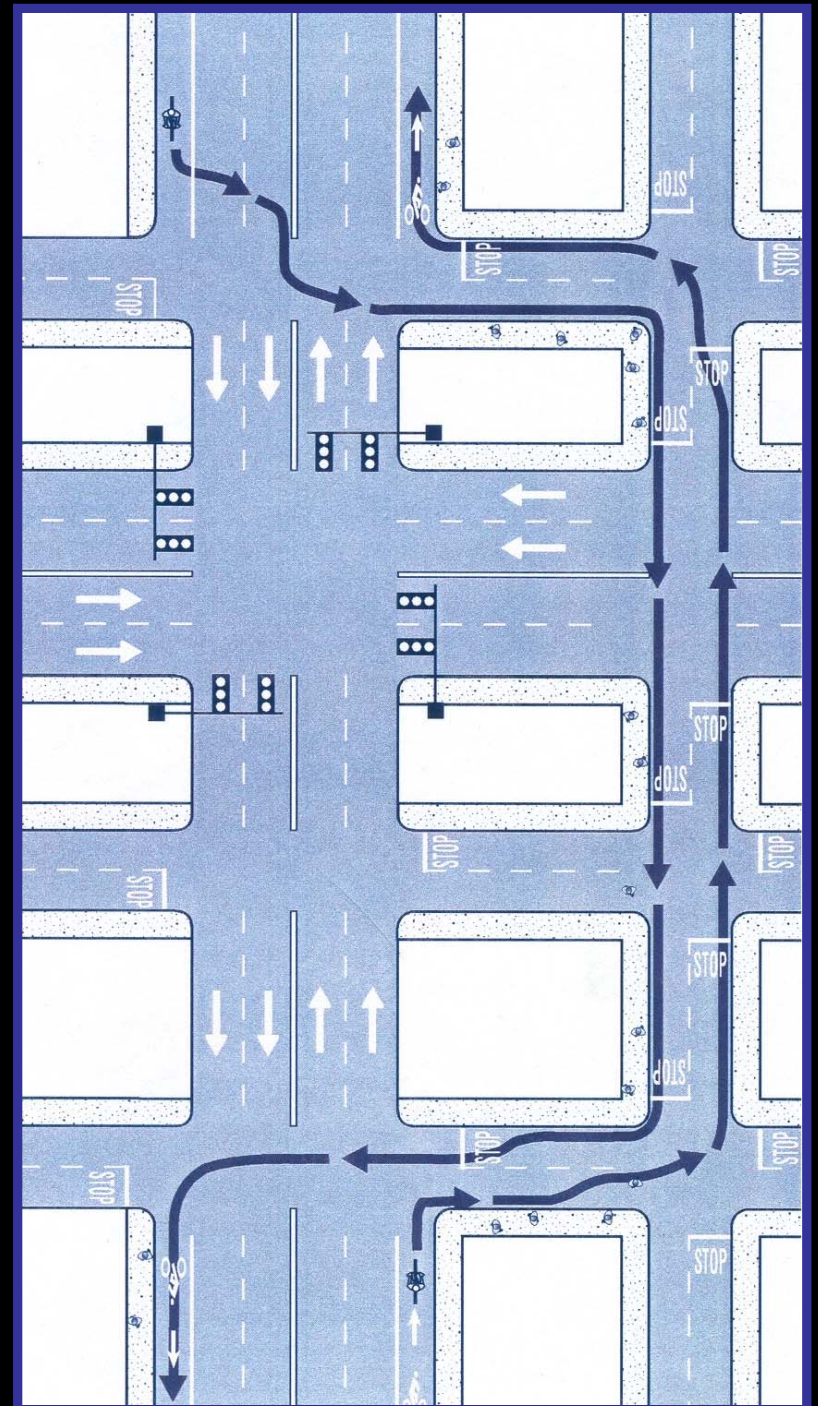
Shared roadway appropriate on low-volume or low-speed streets (*85% or so of streets in a city*)



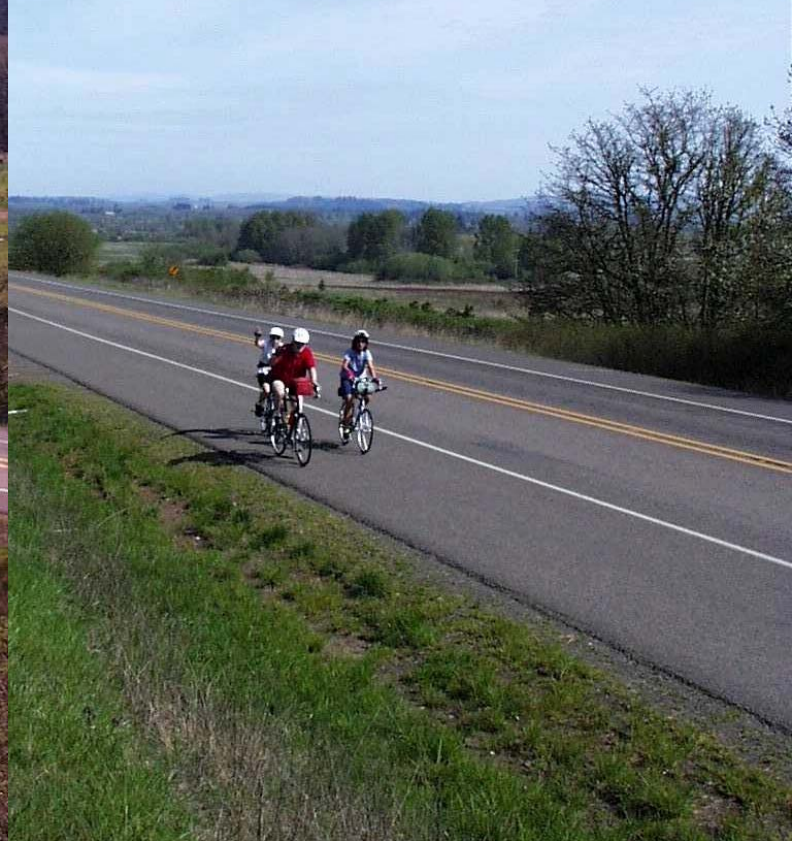
Shared roadway appropriate on low-volume or low-speed streets (85% or so of streets in a city)

Do NOT simply sign with “Diversionary Bike Routes”

- **Thoroughfares are vital, as they offer the most direct routes**
- **Destinations are often located on thoroughfares**
- **Without special treatments, local streets can be slow & discontinuous**
- **Without special treatments, arterials can be difficult to cross**
- **Reentering thoroughfare occurs w/o special treatment**
- **Some cyclists choose thoroughfares anyway, even without appropriate treatment**



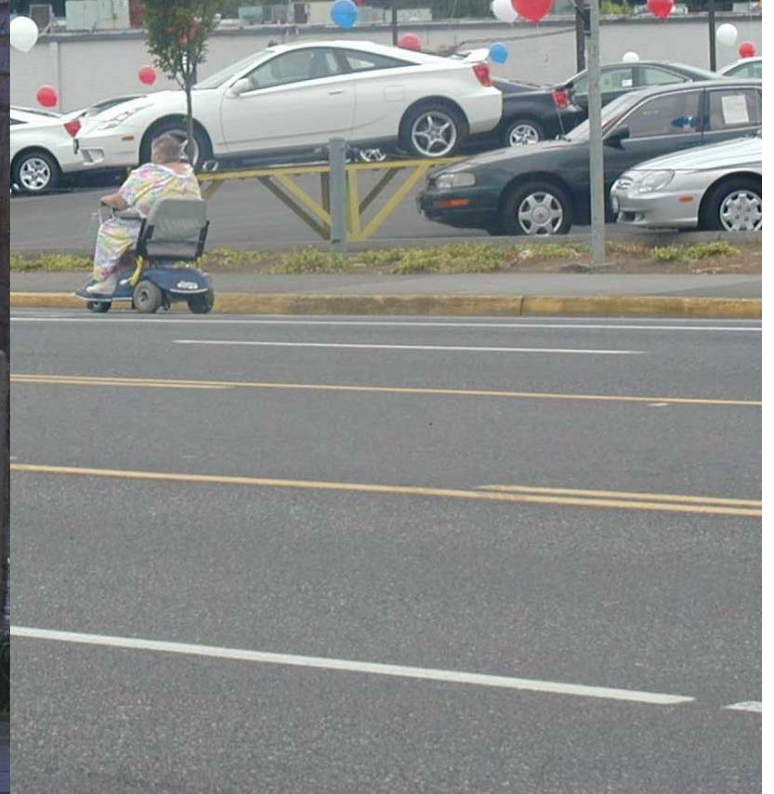
Shoulder Bikeway



Bike lane



Think beyond
bicycling...







Bike lane provides minimal buffer to pedestrians

BIKE LANE RESTRIPING ROAD DIETS

WHY?

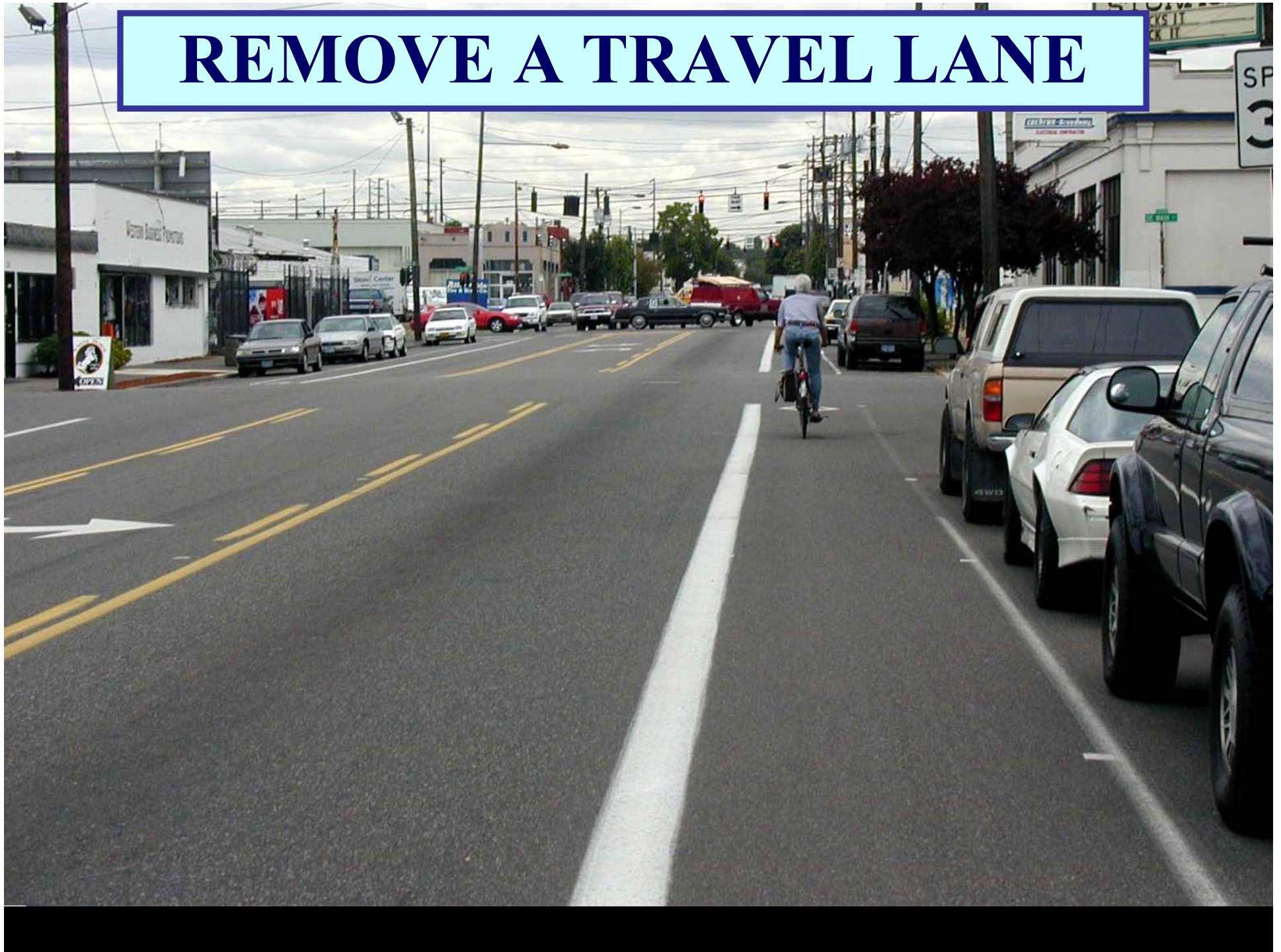


"BECAUSE THEY'RE THERE"

NARROW TRAVEL LANES



REMOVE A TRAVEL LANE

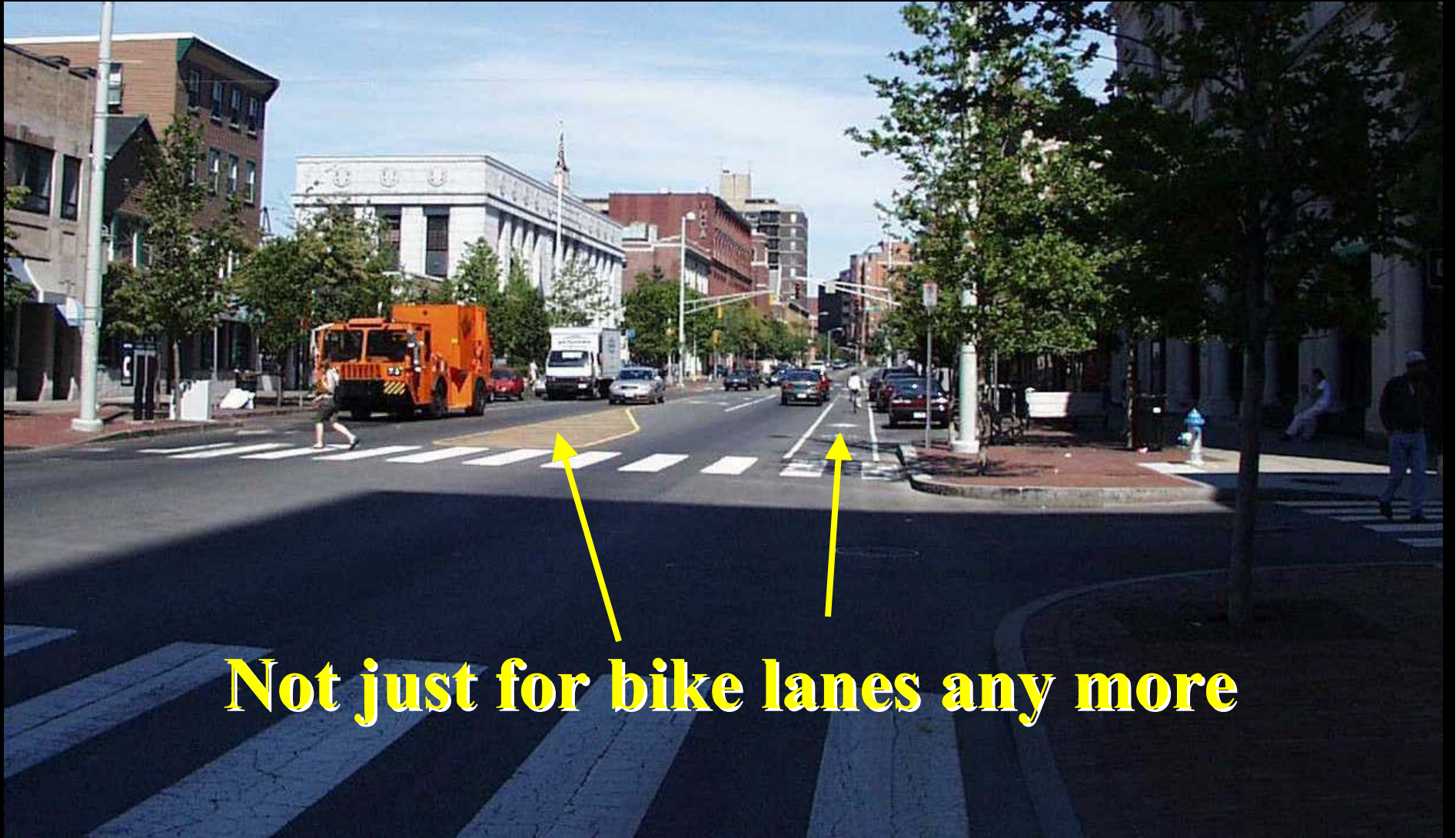




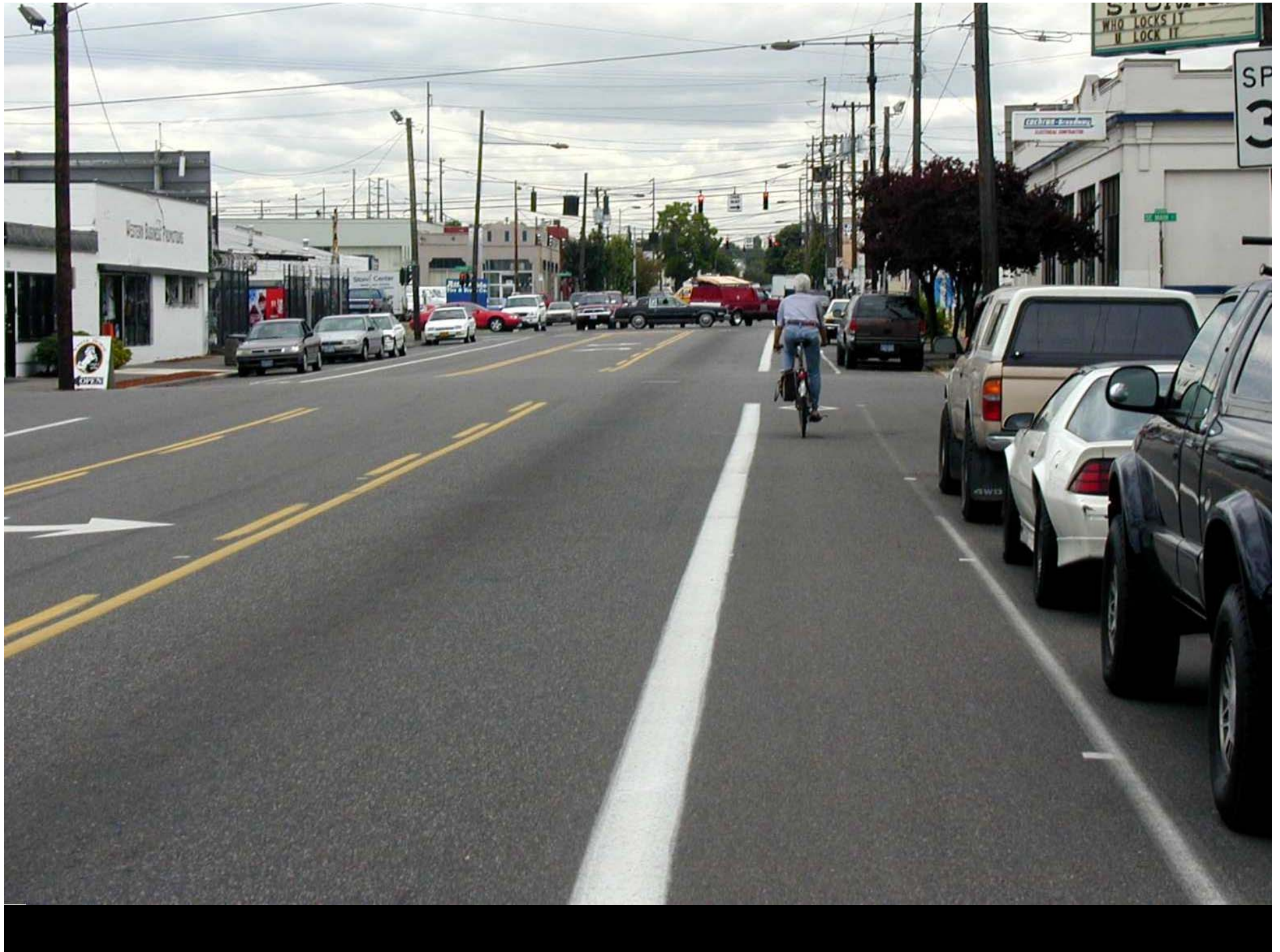
Reallocation Of Asphalt Domain Distributing Infrastructure for Everyone's Transportation

“Road Diets”

Reclaiming street space for other uses



Not just for bike lanes any more





Old centerline

Reassigning road space creates room for islands



The message – streets are for many users...



A good street accommodates many uses



Be a hero!